



CIOB Awarding Organisation

**Level 4 Certificate in Site Management
Level 4 Diploma in Site Management**

Syllabus

July 2010

Course units

1. Project Planning
2. Project Control And Monitoring
3. Managing The Quality Of Site Work
4. Managing Health, Safety, Welfare And Risk Control At Work
5. Managing Dimensional Control On Sites
6. Developing And Managing People
7. Improving Managerial Skills
8. Contractual And Legal Responsibilities
9. Estimating And Measuring Work
10. Managing Sub-Contractors
11. Managing Building Services
12. Managing Technology Of Modern Construction.

Rules of Combination

- The completion of any 4 units is required to achieve the Certificate qualification.
- All 12 units are mandatory to achieve the Diploma qualification.

1. Project Planning

Title	DSM 1 – Project Planning
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Identify and obtain relevant information in order to plan works.	<p>1.1 Identify the sources of information required to communicate and plan construction works. These include:</p> <ul style="list-style-type: none"> • Current master/overall programme and plans • The contractual documents • Statutory requirements • Internal and external resource information available for planning • Recording documentation • Responsibilities of associated personnel • Areas of work subject to change • Estimating data • Pre-tender documentation. <p>1.2 Describe processes for obtaining and identifying planning information.</p> <p>1.3 Check planning information to identify inaccurate and missing information.</p>
2. Produce a method statement for the works	<p>2.1. Examine drawings, specifications and other documents relating to proposed construction projects in order to produce method statements. Key aspects include:</p> <ul style="list-style-type: none"> • Prepare the site prior to starting work, identifying and developing alternatives • Identify proposals which are not feasible • Highlight proposals which do not conform with statutory requirements • Determine proposals which represent unsafe working conditions • Indicate proposals which will require special measures for execution <p>2.2. Produce method statements for various activities and evaluate alternative construction methods for these activities.</p>
3. Produce a programme for the works	<p>3.1. Identify and select appropriate planning tools for the task. Relevant tools include:</p> <ul style="list-style-type: none"> • Bar charts • Network analysis • Critical activities • Supply lead times • Resource schedules. <p>3.2. Identify the construction activities, and determine their durations.</p> <p>3.3. Combine these durations into a coherent overall programme for the works.</p>
4. Inspect the site for the execution of the works	<p>4.1. Inspect the site and identify where proposed plans will not be feasible</p> <p>4.2. Report findings and make recommendations to revise the proposed plans</p>
5. Establish and maintain on-site administrative systems.	<p>5.1. Identify relevant administrative systems for running the site.</p>

	<p>5.2. Explain how to implement relevant administrative systems for running the site.</p> <p>5.3. Evaluate how the site staff use the administrative systems to ensure the project objectives are achieved</p>
6. Determine resource requirements for works.	<p>6.1 Assess the quantities and qualities of materials needed for the work.</p> <p>6.2 Assess the plant and equipment needed for the work</p> <p>6.3 Assess the labour needed for the work and sub contractors.</p>
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of project planning. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management.
Unit guided learning hours	30

2. Project Control and Monitoring

Title	DSM2 - Project Control and Monitoring
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment Criteria: The Learner can:
1. Procure materials for the execution of the works	<p>1.1. Assess the quantities, quality and costs of the materials needed for the works.</p> <p>1.2. Check and confirm that all materials proposed or provided for the contract comply with the relevant specifications and requirements, and are available to meet the contract programme of work.</p> <p>1.3. Complete records and administrative procedures for calling forward, notifying and receiving materials on site.</p>
2. Procure plant and equipment for the execution of the works.	<p>2.1. Assess the specifications, costs and availability of the plant and equipment needed for the works.</p> <p>2.2. Complete records and administrative procedures for calling forward, notifying and receiving plant and equipment on site.</p>
3. Monitor the progress of works	<p>3.1. Assess and record actual performance and compare with the contract programme and specification.</p> <p>3.2. Identify actual or anticipated variations from the contract programme and specification and take action to reduce or eliminate the variation.</p> <p>3.3. Inform relevant personnel and organisations of achieved performance against programme and specification, and any corrective actions needed.</p> <p>3.4. Monitor, control and record site activities that affect the environment.</p> <p>3.5. Identify the effect of changes or delay in the provision of contract information.</p>

	<p>3.6. Collect feedback on the progress of the works, and use this to bring about future improvements.</p>
<p>4. Monitor and control the supply and use of materials</p>	<p>4.1. Identify sub-standard materials and arrange replacements.</p> <p>4.2. Control the use of materials to prevent waste and loss, and protect the environment.</p> <p>4.3. Arrange for protection and security of materials prior and subsequent to building operations.</p> <p>4.4. Keep records of material requirements, delivery and utilisation.</p>
<p>5. Monitor and control the use and deployment of plant and equipment.</p>	<p>5.1. Check that plant and equipment is used in accordance with the relevant operating instructions and regulations, and take account of environmental issues.</p> <p>5.2. Check that plant and equipment is maintained to provide safe and effective operation and is safely and securely stored when not in use.</p> <p>5.3. Keep records of plant and equipment receipts, usage and disposal.</p>
<p>6. Monitor expenditure against budget</p>	<p>6.1. Describe the procedures needed to monitor costs during the progress of project work.</p> <p>6.2. Assemble all available information relevant to expenditure and liaise with those responsible for budgetary control.</p> <p>6.3. Identify actual or anticipated variations from the contract budget and take action to reduce or eliminate any overspend.</p>
<p>7. Monitor and record works to enable financial recovery.</p>	<p>7.1. Keep records of work done, resources used and costs incurred.</p> <p>7.2. Liaise with commercial colleagues to confirm that these records enable the due financial recovery</p> <p>7.3. Advise commercial colleagues of any contract variations that will affect financial recovery.</p>
<p>Additional Information about the unit</p>	
<p>Units aim(s)</p>	<p>This unit is designed for Construction Site Managers, to give them knowledge of project control and monitoring. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision. This unit forms part of the Level 4 Diploma in Site Management.</p>
<p>Unit guided learning hours</p>	<p>30</p>

3. Managing the Quality of Site Work

Title	DSM3 – Managing the Quality of Site Work
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Learning Criteria: The Learner can:
1. Identify quality systems, procedures and standards and communicate them to project personnel.	<p>1.1. Interpret drawings, specifications and other documents relevant to the quality of the work and,</p> <p>1.2. Convey quality requirements to all levels of the construction team. These include:</p> <ul style="list-style-type: none"> • Appearance • Performance • Structural soundness • Dimensional accuracy <p>1.3. Explain the responsibilities and tasks of those involved in ensuring the quality of the work through appropriate construction technology.</p> <p>1.4. Explain the role of statutory documents in determining quality control:-</p> <ul style="list-style-type: none"> • Building Regulations • Codes of Practice • British Standards • Agreement Certificates • Contract Documents • Contract Drawings • Technical Specifications
2. Operate and maintain systems to monitor quality of work.	<p>2.1. Identify the areas of work where defects are likely to occur.</p> <p>2.2. Explain the necessity for carrying out on-site and off-site testing.</p> <p>2.3. Carry out inspections of completed and partially completed work to ensure that project and statutory requirements are complied with.</p> <p>2.4. Evaluate the results of on-site and off-site material tests and inspections.</p> <p>2.5. Assist in the implementation of quality systems</p> <p>2.6. Liaise and discuss with other members of the construction team on quality control matters (Architect, Civil Engineer, Clerk of Works, site staff, tradesmen etc.).</p> <p>2.7. Carry out corrective action to maintain quality standards.</p> <p>2.8. Complete quality plans and other checks as required by quality systems.</p>
3. Establish methods of work that will ensure sustainable quality in the project.	<p>3.1. Ensure that the workforce is aware of sustainability issues on site.</p> <p>3.2. Delegate responsibility for the protection of the environment on site.</p> <p>3.3. Assess the significance of sustainability factors insofar as they affect the quality of the project and take appropriate action.</p> <p>3.4. Keep records of environmental issues insofar as they affect the quality of the project and report to the people responsible.</p>

Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of managing the quality of site work. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management.
Unit guided learning hours	30

4. Managing Health, Safety, Welfare and Risk Control at Work

Title	DSM 4 – Managing Health, Safety, Welfare and Risk Control at Work
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Work with clients and other professionals in accordance with current CDM legislation	<p>1.1 Clarify the client's obligations under current CDM legislation.</p> <p>1.2 Assist clients and other professionals to meet these obligations.</p> <p>1.3 Maintain organisational and communication systems on site with respect to health, safety and welfare.</p>
2. Manage project health, safety and welfare information.	<p>2.1 Obtain relevant HSW information. This will include:</p> <ul style="list-style-type: none"> • Current CDM regulations • Design information including residual risks • Surveys • Reports • Statutory approvals, requirements and notifications • Specifications, drawings and schedules • Existing health and safety files <p>2.2 Evaluate relevant HSW information for H&S purposes as part of the construction phase.</p> <p>2.3 Maintain up to date HSW notices and documents.</p> <p>These will include:</p> <ul style="list-style-type: none"> • Health & Safety plan • Safe systems of work including site traffic and fire control • Statutory notices and reports (e.g. safety policies, insurances, • Project notification, tower cranes, what you need to know posters) • Hazard control including warning and signing • Inspection and maintenance, including site inspections, plant & equipment checks, scaffolding, excavations) • CSCS cards <p>2.4 Inform site staff of their obligations under HSW legislation. This will include:</p> <ul style="list-style-type: none"> • Duty of care • HSW induction and training (e.g. toolbox talks)

	<ul style="list-style-type: none"> • Use of PPE • Accident, RIDDOR, dangerous occurrence and near miss reporting • COSHH/NIOSE/vibration assessment • Safe use of materials <p>2.5 Write a simple risk assessment.</p> <p>2.6 Explain the CSCS scheme and the different CSCS cards.</p>
3. Maintain health, safety and welfare on site.	<p>3.1. Review planned working methods to comply with best HSW practice.</p> <p>3.2. Identify and assess HSW hazards and controls.</p> <p>3.3. Identify and assess HSW risks arising from the hazards.</p> <p>3.4. Plan to manage HSW risks. This will include:</p> <ul style="list-style-type: none"> • Elimination • Control at source • Cumulative protection • Management • Personal protection <p>3.5. Contribute to the maintenance of the CDM H&S file.</p> <p>3.6. Maintain HSW equipment and resources in good order. This will include:</p> <ul style="list-style-type: none"> • Personal protective equipment • First aid facilities • Welfare facilities • Storage and security • Fire-fighting equipment <p>3.7. Deal with breaches of HSW requirements.</p> <p>3.8. Encourage a culture of good HSW practice on site.</p> <p>3.9. Carry out site inspections and audits.</p>
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of good health, safety and welfare practice on site. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management.
Unit guided learning hours	30

5. Managing Dimensional Control on Sites

Title	DSM5 – Managing Dimensional Control on Sites
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment Criteria: The Learner can:
1. Obtain relevant setting out information, and check its accuracy.	<p>1.1. Identify and interpret the information available or required to carry out the setting out or levelling procedures This will include:</p> <ul style="list-style-type: none"> • Existing levels and datums • Drawings and specifications • Tolerances <p>1.2. Check the setting out information for accuracy and consistency with site conditions.</p> <p>1.3. Identify any variances, and how to resolve these.</p>
2. Prepare to establish dimensional control.	<p>2.1. Describe the need to adhere to specified tolerances for a range of commonly used materials and components.</p> <p>2.2. Describe with examples the need for attention to safety whilst carrying out surveying, levelling and setting-out operations.</p> <p>2.3. Use the correct terminology for setting out.</p> <p>2.4. Check that the surveying equipment is properly calibrated.</p>
3. Establish dimensional control.	<p>3.1. Establish datum points on site from information given on drawings and schedules.</p> <p>3.2. Set out the works from the datum points.</p> <p>This includes:</p> <ul style="list-style-type: none"> • Lines • Levels • Angles • Distances • Curves <p>And the use of:</p> <ul style="list-style-type: none"> • Tape • Optical square • Surveyor's level • Theodolite <p>3.3. Set out site rails and travellers for excavations.</p> <p>3.4. Establish control procedures for setting out internal walls, fixtures and fittings.</p> <p>3.5. Keep records of setting out for quality control and quality assurance purposes.</p>
4. Check setting out carried out by others.	<p>4.1. Gather the necessary information regarding the contract information and the setting out records.</p> <p>4.2. Check setting out carried out by others.</p> <p>4.3. Identify any variances, and inform the relevant people.</p>

Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of managing dimensional control on site. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management.
Unit guided learning hours	30

6. Developing and Managing People

Title	DSM 6 – Developing and Managing People
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Manage people on site.	<p>1.1 Identify the site manager's role in the organisation.</p> <p>1.2 Describe and compare leadership skills and techniques needed to lead teams:</p> <ul style="list-style-type: none"> • Leadership theories • Types and qualities of a leader • Compare different styles of leadership • Set and communicate clear team objectives • Develop a team • Handle team changes <p>1.3 Identify and compare means of motivating others and apply the principles to the work situation, including:</p> <ul style="list-style-type: none"> • Identify and remove barriers to motivation • Recognise motivating factors and apply them • Evaluate and use methods of motivating the boss, colleagues and team • Motivation through leadership • Empowerment <p>1.4 Describe the means of identifying and analysing human behaviour and its impact on human relationships, including:</p> <ul style="list-style-type: none"> • Behavioural science theories and their development • Basic human needs and how they influence behaviour • Group needs and group relationships • Analyse a human relations problem <p>1.5 Identify the various aspects of negotiations. These will include:</p> <ul style="list-style-type: none"> • clarifying and understanding the issues • having alternative proposals and arguments • must there be an agreement? • which parties face deadlines? • does the other side want an agreement? • Negotiating tactics and ways of breaking deadlocks
2. Develop productive working relationships	<p>2.1 Describe the benefits of productive working relationships</p> <p>2.2 Describe the principles of effective communication</p> <p>2.3 Resolve differences of opinion in ways that minimise offence and maintain good will, trust and respect.</p> <p>2.4 Take account of diversity issues in the workplace</p>

<p>3. Assess the performance of team members</p>	<p>3.1 Allocate work to team members</p> <p>3.2 Monitor the progress and quality of the work of team members</p> <p>3.3 Assess the achievements of team members</p> <p>3.3 Provide prompt and consistent feedback to team members.</p>
<p>4. Identify and review development and training activities for individuals.</p>	<p>4.1 Identify the learning needs of team members</p> <p>4.2 Identify relevant training activities for the site team. These will include:</p> <ul style="list-style-type: none"> • Specifically designed work activities • Education and training courses • Obtaining appropriate experience. <p>4.3 Negotiate and agree with training providers the training programmes for the site team.</p> <p>4.4 Review the effectiveness of the training</p>
<p>5. Manage own Continuing Professional Development (CPD)</p>	<p>5.1 Define own personal aims and objectives for undertaking development.</p> <p>5.2 Contact sources of support and guidance to identify recognised standards to help manage your personal development</p> <p>5.3 Analyse the current level of your knowledge and performance and create a development action plan (DAP).</p> <p>5.4 Prepare a DAP for achieving identified development needs.</p> <p>5.5 Undertake development activities aimed at achieving identified development needs, and record the results in your personal development record (PDR).</p> <p>5.6 Evaluate the CPD undertaken, and record this in your PDR.</p> <p>5.7 Review the cycle of personal development needs to revise and update your aims and objectives to suit changing circumstances</p>
<p>6. Apply relevant practices to manage people on site</p>	<p>6.1 Describe how to carry out your organisation's disciplinary procedures</p> <p>6.2 Identify the causes of interpersonal conflict between personnel and remove or minimise these causes in the following ways:</p> <ul style="list-style-type: none"> • Communicate expected standards of work and behaviour to team members • Provide opportunities for team discussion of problems • Act as conciliator and/or arbiter in cases of dispute. <p>6.3 Apply the organisation's disciplinary and grievance policies and procedures.</p>
<p>Additional information about the unit</p>	
<p>Units aim(s)</p>	<p>This unit is designed for Construction Site Managers, to give them knowledge of developing and managing people on site. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision. This unit forms part of the Level 4 Diploma in Site Management.</p>
<p>Unit guided learning hours</p>	<p>30</p>

7. Improving Managerial Skills

Title	DSM 7 Improving Managerial Skills
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Manage oneself	<p>1.1 Provide examples of how feelings can affect personal performance</p> <p>1.2 Provide examples of how to control personal feelings</p> <p>1.3 Be consistent in personal behaviour (<i>say what you think and do what you mean</i>)</p> <p>1.4 Show adaptability and initiative in the face of challenges</p>
2. Manage others	<p>2.1 Be attentive to the needs of others</p> <p>2.2 Explain the factors influencing the relationships between oneself and others</p> <p>2.3 Explain how to lead, influence, coach and support others</p> <p>2.4 Explain how to resolve conflicts with others</p>
3. Build and manage teams	<p>3.1 Explain the purpose of the team</p> <p>3.2 Explain the importance of selecting appropriate team members</p> <p>3.3 Explain the importance of inducting new members into the team</p> <p>3.4 Explain the importance of appropriate team management strategies :</p> <ul style="list-style-type: none"> • Directing • Negotiating • Advising • Delegating <p>3.5 Explain the negotiating process and carry out a negotiation with a team member, client, colleague, boss etc. This will include the following:</p> <ul style="list-style-type: none"> • Examine approaches to negotiation and its conventions • Plan strategy and outcomes • Compare the ways of influencing people • Apply negotiation principles to an actual negotiation • Assess the success or otherwise on completion
4. Manage site correspondence and relevant records	<p>4.1 Draft a business letter and memorandum.</p> <p>4.2 Draft a business report.</p> <p>4.3 Summarise notes of a conversation a</p>
5. Manage site meetings	<p>5.1. Prepare an agenda for a site meeting, including items for discussion and planned outcomes.</p> <p>5.2. Chair a site meeting, discuss the agenda items and achieve the planned outcomes.</p> <p>5.3. Prepare notes of a site meeting, and ensure that agreed actions are carried out.</p>
6. Make effective use of own time.	6.1 Describe the interaction of urgent/not urgent and important/ not important pressures on your time.

	<p>6.2 Prioritise your tasks according to organisational priorities.</p> <p>6.3 Explain the essentials in making the most use of time available, including:</p> <ul style="list-style-type: none"> • Identifying aims/goals • Planning activities • Delegation of authority • Use of meetings • Assertive behaviour • Avoiding physical and mental fatigue • Monitoring use of time
7. Improve communication with others	<p>7.1 Identify information needed by the site team and others</p> <p>7.2 Ensure that this information is passed on</p> <p>7.3 Check that the information has been received, understood and acted upon.</p> <p>7.4 Select the most appropriate methods for informing and advising others, taking into account:</p> <ul style="list-style-type: none"> • Confidentiality • Reading skills of receivers • Time available • Maintenance of good personal relationships • Resources and systems for conveying information • Information level and pace required by receiver
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of improving managerial skills. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management
Unit guided learning hours	30

8. Contractual and Legal Responsibilities

Title	DSM 8 – Contractual and Legal Responsibilities
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Ensure compliance with the relevant contract conditions	<p>1.1 Describe the principles of the formation of a contract and the remedies open to either party if the contract is not complied with.</p> <p>1.2 Identify different types of contract used in the construction industry and the type of work where each may be used.</p> <p>1.3 Identify the contractual responsibilities of other parties involved in the contract.</p> <p>1.4 Explain the reason for contract documents, how the package is formulated, the variations in content and the obligations different packages place on a company and the site manager.</p>

	<p>1.5 Describe the content and stated procedures of contract clauses, in particular those which may be influenced by the actions of a site manager - e.g. variations, extensions of time etc.</p> <p>1.6 Identify and assess the implications of contract conditions to the execution of site work.</p>
<p>2. Contribute to the recovery of payment due under the contracts</p>	<p>2.1 Keep appropriate on-site documentation and records so that the company's contractual position is protected at all times.</p> <p>2.2 Keep records of factors causing delay and expense to the contract, including additional and changed work.</p> <p>2.3 Liaise with commercial colleagues to ensure the prompt and regular submission of applications for payment.</p> <p>2.4 Recognise situations on site which may lead to non-compliance and possibly to the formulation of a contractual or extra-contractual claim on behalf of or against the company.</p> <p>2.5 Apply the site procedures for the development/prevention of a contractual claim.</p> <p>2.6 Negotiate and discuss with other parties in order that claims are developed/prevented and the company position is protected.</p>
<p>3. Apply relevant legal principles</p>	<p>3.1 Describe the nature of a tort and the remedies available.</p> <p>3.2 Identify the tort of negligence and the relationship of master and servant and the vicarious liability of the master for acts of the servant.</p> <p>3.3 Define breach of statutory duty relationship to negligence, the concept of strict liability, and the principles of delegated legislation - doctrine of ultra vires.</p> <p>3.4 Describe the distinction between nuisance and trespass to land.</p> <p>3.5 Describe public nuisance and its nature and the conditions necessary to gain a personal remedy.</p> <p>3.6 Identify the nature of and remedy for private nuisance. Give examples of nuisance.</p> <p>3.7 Describe the principles of insurance on construction contracts.</p> <p>3.8 Monitor and implement site measures to ensure compliance with the insurance requirements under Statutory Obligations and the Form of Contract.</p>
<p>4. Apply the enforcement powers relating to the Building Regulations/Planning Regulations.</p>	<p>4.1 Ensure that work is carried out in ways that conform to planning requirements.</p> <p>4.2 Ensure that the site work is conducted in ways which conform with the requirements of the building regulations and the relevant building control procedures</p>
<p>5. Take site actions and decisions to ensure that planned work and work in progress do not contravene statutory and legal obligations</p>	<p>5.1 Identify the powers invested in the Highway Authority and the regulations and procedures associated with the Highways Acts.</p> <p>5.2 Identify site problems which relate to the sections concerned of the Public Health Acts.</p> <p>5.3 Describe the function of Local Byelaws.</p> <p>5.4 Identify the responsibility for listed buildings in conservation areas.</p> <p>5.5 Explain the ways in which tree preservation orders affect site operations.</p>

	<p>5.6 Identify the persons having right of entry on to a site.</p> <p>5.7 Monitor and implement site measures to ensure compliance with legal obligations in respect of negligence, nuisance and trespass.</p> <p>5.8 Implement the necessary measures to be taken when working adjacent to, on or above a highway.</p> <p>5.9 Describe the process a construction site manager must undertake on discovery of archaeology on site.</p>
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of contractual and legal responsibilities. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management
Unit guided learning hours	30

9. Estimating and Measuring Work

Title	DSM 9 – Estimating and Measuring Work
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Apply the principles of estimating and tendering that underpin a project.	<p>1.1 Describe the type and purpose of pre-tender and pre-contract processes, which are undertaken in preparing an estimate and tender, including:</p> <ul style="list-style-type: none"> • Site visits • Pre-tender method statements • Pre-tender programmes • Discussions with designer and client • Consultation with statutory bodies • The obtaining of quotations from sub-contractors and suppliers • Identification of resources <p>1.2 Identify the structure, key sources and types of information an estimator uses in establishing preliminary costs and the build up of rates.</p> <p>1.3 Explain the structure and functions of a Bill of Quantities, its format and subdivisions etc.</p> <p>1.4 Describe the ways and formats used to provide cost control information derived from project estimates and Bills of Quantities - labour, plant, materials, and preliminaries.</p> <p>1.5 Describe the methods employed for procuring and organising projects, for example:</p> <ul style="list-style-type: none"> • Negotiated work • Open and closed tenders • Management fee • Design and build • Serial tenders
2. Contribute to the valuation of work	2.1 Identify and compare for content, the quantities of work

	<p>expressed in schedules of quantities with that shown on drawings.</p> <p>2.2 Describe the methods by which valuations of work are prepared and of the site manager's role in their preparation.</p> <p>2.3 Monitor and record work to obtain provisional quantities.</p> <p>2.4 Describe major discrepancies in the work described in the Bills of Quantities or other measurement document by comparison with the work shown on the drawings.</p> <p>2.5 Describe major discrepancies in the contract specification descriptions and those on the drawings, Bills of Quantities and other project documents.</p> <p>2.6 Discuss all site matters relating to the Estimate and Quantities with other members of the project team.</p> <p>2.7 Record and measure provisionally variations of work.</p> <p>2.8 Assist in the preparation of valuations on site work, to ensure that the content of the valuation represents the completed work.</p>
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of estimating and measuring work. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management

10. Managing Sub-Contractors

Title	DSM 10 – Managing Sub- contractors
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Plan the work of sub-contractors	<p>1.1 Describe the legal requirements of the contract and the relationship between sub-contractor, contractor and clients with particular reference to the process leading to the contract.</p> <p>1.2 Identify types of attendance, i.e.</p> <ul style="list-style-type: none"> • General attendance • Special attendance <p>1.3 Explain the responsibility of the contractor and sub-contractor for special attendance/general attendance.</p> <p>1.4 Identify the contractor's responsibilities for the sub-contract materials.</p> <p>1.5 Assess the responsibility for protection and acceptance of finished work.</p> <p>1.6 Describe the differences between the obligations attached to the main contractor in respect of the following and describe when each would be used:</p> <ul style="list-style-type: none"> • Domestic • Nominated • Named • Labour only

	<p>1.7 Specify work requirement to sub-contractors to meet organisational requirements.</p> <p>1.8 Produce short and long-term programmes for the planning and co-ordination of on and off-site work associated with sub-contracting activities.</p> <p>1.9 Prepare site plans for the delivery, handling, placing and storage of supplies and equipment from supplier and sub-contractors.</p> <p>1.10 Agree sub-contract and related methods of working and monitor sub- contract implementation of agreed methods</p> <p>1.11 Describe design criteria, the requirements of specification, codes of practice and co-ordination of design in so far as they relate to sub contractors and check and confirm the following documents:</p> <ul style="list-style-type: none"> • Design checklist • Design programme • Co-ordinated overlays of mechanical engineering and sub-contractors layouts • Builders work details • Outline specifications • List of secondary design information relative to other trades
<p>2. Manage subcontractors on site</p>	<p>2.1 Identify the processes of integration of sub contract work into the main contact programme and the monitoring of sub-contract progress.</p> <p>2.2 Negotiate with sub-contractors to ensure that pre-start and on-site activities are progressed</p> <p>2.3 Identify the processes involved in the provision of information to sub-contractors</p> <p>2.4 Act promptly upon requests from sub-contractors for information and decisions and record these where necessary.</p> <p>2.5 Manage the provision and dissemination of production information for sub-contractors and the consequences of changes in design and production.</p> <p>2.6 Request that sub-contractors remove defective materials or make good defective work.</p> <p>2.7 Monitor site progress of sub-contractors and keep adequate records.</p> <ul style="list-style-type: none"> • Site instructions regarding progress to the sub-contractor • Verifications of sub-contractor claims • Labour returns for main and sub-contract work. • Information to architect, sub-contractor and contractor on cost of delays. <p>2.8 Provide necessary attendances and services to sub-contractors in accordance with contractual conditions.</p> <p>2.9 Prepare and use checking procedures and checklists to ensure the quantity and quality of materials from the supplier and sub-contractor is correct.</p> <p>2.10 Describe the time implications of cost and the necessity for sub-contractors to work to programme</p> <p>2.11 Maintain records and documentation/notices to prevent disputes and define responsibilities for delay or non-performance.</p> <p>2.12 Explain the quantitative and pricing content of the sub-contract agreement and the need to record and identify responsibilities for variations. Produce the following documentation:</p> <ul style="list-style-type: none"> • Requests for information/instructions (architects)

	<ul style="list-style-type: none"> Record extra works and omissions Day work records <p>2.13 Explain the implications of and responsibility for supervision of sub-contract works. Produce the following documents:</p> <ul style="list-style-type: none"> Report on quality, showing understanding of design and codes of practice Records of inspection noting means of testing showing the tests employed Acceptance notes and checklists Instructions to install work in a specified manner or rectify defective Work
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of managing sub-contractors. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management
Unit guided learning hours	30

11. Managing Building Services

Title	DSM 11 – Managing Building Services
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Plan building services on site	<p>1.1 Describe the purpose and functioning of the building's services.</p> <p>1.2 Identify the main parts and components of building services installation. These will include:</p> <ul style="list-style-type: none"> Temporary site services - electrical, water, telephone, drainage. Low and higher pressure cold and hot water services. Drainage and sanitation. Fire prevention systems. Electrical lighting and power. Gas installations. Telephone and other communication services. Temporary lifts and hoists. Permanent lifts, hoists and escalators. Mechanical ventilation and air conditioning. Mechanical, electronic security systems. Computer installations. <p>1.3 Explain the acceptable services construction sequences for the work.</p>
2. Manage building services on site	<p>2.1 Read and interpret mechanical and electrical services drawings.</p> <p>2.1 Prepare and use a check list to monitor the progress of installation work.</p> <p>2.3 Identify the forms of specification used in mechanical and engineering services and describe their application to quality control of work.</p>

	<p>2.4 Discuss technical aspects of a service installation and negotiate with designers and contractors to resolve problems.</p> <p>2.5 Determine deviations from the specified materials and construction methods of service installation.</p> <p>2.6 Determine the sequence of installation of a service system</p>
3. Hand over building services	<p>3.1 Explain the requirement and procedures for testing services installations during the construction period.</p> <p>3.2 Witness the necessary testing and commissioning of service installation in accordance with contract information and performance manuals.</p> <p>3.3 Hand over the completed service installation to the client.</p>
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of managing building services. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management
Unit guided learning hours	30

12. Managing the Technology of Modern Construction

Title	DSM 12 – Managing the Technology of Modern Construction
Level	4
Credit value	8
Learning outcomes: The learner will know how to:	Assessment criteria: The Learner can:
1. Identify the key aspects of Construction Technology	<p>1.1 Describe the function, purpose and limits of use of materials and systems which it is proposed to be incorporated into the Building/Civil Engineering project. Technologies will include:</p> <ul style="list-style-type: none"> • Ground Stabilisation, Specialised piling systems and precast and insitu concrete foundation systems • Building Structures produced from a range of modern materials. • External envelope and roof coverings in a range of materials. • Internal dividing walls and fixtures and fittings associated with them. • Internally applied finishes to floors, walls and ceilings • Externally applied finishes to vertical and horizontal surfaces • External works including drainage, surfacing and landscaping. <p>1.2 Examine, interpret and cross reference drawings for the project in order to determine and agree the buildability of the work.</p> <p>1.3 Identify any shortfall in the buildability of the project and resolve the problems to the satisfaction of those involved.</p> <p>1.4 Evaluate and obtain advice on materials and installation methods for materials that are provided by the manufacturer</p> <p>1.5 Describe the function and purpose of the installed technology to ensure that installation is planned to avoid damage and deterioration of the completed work.</p> <p>1.6 Describe the process of installation that needs to be carried out to ensure that the work conforms to the drawings and all other requirements of the project</p>
2. Manage the construction of the project work to ensure conformance with technology practice and the requirements of the designed objectives of the project.	<p>2.1 Liaise with all interested parties to ensure that the as built project is technically sound and fits the requirements of the design.</p> <p>2.2 Manage any remedial work needed to ensure that the completed work meets the requirements of the project.</p> <p>2.3 Liaise with product experts to ensure that the use of products and materials has the capability of meeting the needs of the project.</p> <p>2.4 Apply systems to formally sign off the completed work to indicate conformance with the requirements of the project.</p>
Additional information about the unit	
Units aim(s)	This unit is designed for Construction Site Managers, to give them knowledge of managing the technology of modern construction. This knowledge is gained through a mix of classroom learning and the application of this learning in the workplace under supervision . This unit forms part of the Level 4 Diploma in Site Management
Unit guided learning hours	30