CIOB
The Chartered Institute of Building

Qualifications

Syllabus

CIOB Level 6 Design and Construction Management

(QAN:)610/5568/2

V1 – 20_03_25

Contents

Qualification Details

1.1 Qualification Aims

The CIOB Level 6 Diploma in Design Construction and Management is designed for experienced construction design technicians. This qualification comprises 8 units and is designed to develop the learner's knowledge and skills to manage construction projects. The qualification units are:

Unit 1 – The Construction Environment
Unit 2 – Construction Design Management
Unit 3 – Construction Project Planning and Monitoring
Unit 4 - Managing People and Teams in Construction
Unit 5 – Health, Safety and Wellbeing in Construction
Unit 6 - Construction Technology
Unit 7 – Sustainable Construction
Unit 8 – Managing Quality in Construction
Unit 9 – Professional Practice in Construction

1.2 Progression to Other Qualifications

The Diploma is at level 6 of the Regulated Qualifications Framework (RQF) and is assigned with 85 credits. Higher education providers may consider these qualifications for exemption from certain modules within their undergraduate or other relevant qualifications.

1.3 Qualification Units

To achieve the Level 6 Diploma, learners are required to undertake all 9 units.

Total Qualification Time for the Diploma is 850 hours (about 20 months); 272 guided learning hours plus 578 personal study hours.

1.4 Unit Exemptions

A maximum of 3-unit exemptions are allowed for this qualification.

1.5 Entry Requirements

Desirable
Level 2 English is desirable to complete the apprenticeship
Level 2 Mathematics is desirable to complete the apprenticeship
AND
Site Safety Plus Site Managers' Training Scheme (may be delivered during the qualification)
Site Environmental Awareness Scheme (may be delivered during the qualification)

Mandatory
One of:
Level 4 Higher National Certificate or equivalent
Level 5 Higher National Diploma or equivalent
Higher (Level 4) apprenticeship in Construction Design and Build Technician
Or
Employed in the role with 2 years' experience in construction or equivalent.

Apprentices aged under 18 years old at the time of starting the qualification will need to achieve Level 2 English and Maths before completion.

1.6 Assessment

The assessments are set by the provider and must be approved by the CIOB Awarding Organisation prior to being issued to learners. Tutor-led formative assessments should be carried out throughout the course.

All completed assessments are marked by the centre, internally verified and subject to external moderation sampling by the CIOB Awarding Organisation.

The assessment criteria cover 3 areas:

1. **Task achievement** – This is a measure of how well the learner answers the task question/questions and the identification of the important aspects of the task.

2. **Technical Content** – This is a measure of how well the learner identifies, describes, and evaluates the task's technical aspects.

3. **Presentation** – This is a measure of how well the learner presents the assignment and includes the quality of the structure and paragraphing, the quality and relevance of visual or graphical content and the referencing used for quoted sources.

1.7 Grading

This qualification is pass or refer only. All Units must be passed to achieve the award. Assessments should be assignments, practical exercises, project scenarios.

Indicative marking descriptors for differentiating between levels of achievement when marking assignments are provided below (Section 1.8).

1.8 Indicative Marking Descriptors – Level 6 Diploma in Construction Management

* Please note that the bands below describe indicative characteristics only. An overall holistic approach is required when assessing a learners' work and assigning a grade.

Grade	Task Achievement The Relevance of the Response	Inclusion of Relevant Technical Knowledge in Content	Presentation/Coherence
Pass			
40-100%	The work demonstrates an understanding of the task. The main points are identified, and the task is achieved. There is no attempt to evaluate or analyse the solutions. There may be some inaccuracies, omissions and irrelevant content. There may be lack of control in relation to the word count.	The work demonstrates an understanding of the main technical issues which are identified. This may be limited to description with little evidence of evaluation. There may be some omissions and inaccuracies in detail. There may be some irrelevant details.	There is an attempt to structure the information. There is evidence of paragraphing and titling which is not always appropriate. Some basic graphical information may be included which is of some assistance to the reader. There may be some omissions or inaccuracies. There is clear evidence of appropriate referencing. The work is generally coherent but there may be occasional lapses in coherence and structure.
Fail			
0-39%	The work shows a poor understanding of the task. Frequent inaccuracies. Failure to identify important aspects of the task. Much of the information is irrelevant to the task. There may be evidence of copy and paste from external sources. The response may be limited to lists of words with no attempt to explain the relevance/merits of these to the task. The assignment falls short of the word count.	The work demonstrates a lack of understanding of the technical aspects. There are omissions of important technical information. Errors are evident in the technical content. There is no attempt to explain the relevance of the technical content to the task.	Lacks structure and may be limited to lists of points which are not developed. Disorganised in structure causing difficulty for the reader to understand the points. The response is Illegible or incoherent in places. No referencing of external sources. The graphical illustrations are of poor quality or absent. They may be irrelevant. There may be errors and a lack of clarity causing difficulty for the reader to understand.

1.9 The Apprenticeship Knowledge, Skills and Behaviour Requirements

Units:	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9
Knowledge									
K1/K7/S7 Information Management		√	√	√				√	√
K2 HS&W	√	√	√	√	√	√			√
K3 Legal	√	√		√	√		√	√	√
K4 Client Briefs		√	√		√				√
K5/6 Team Building			√	√	√				√
K8 Technology		√	√			√	√	√	√
K9 Procurement			√						√
K10/S9 Value Management		√	√			√			√
K11/S10 Risk Management		√	√	√		√			√
Skills									
S1 Feasibility		√	√						√
S2 Sustainability	√	√					√		√
S3 HS&W	√	√	√	√	√				√
S4 Project Management		√	√						√
S5/ S6 Managing Legal	√	√	√		√		√		√
S6 Design Development		√							√
S8 Contracts/tender	√	√	√						√

Units:	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9
Behaviours									
B1 Professional Judgment	√	√	√						√
B2 Code of ethics	√								√
B4 Collaboration			√		√			√	√
B5 Team working		√			√				√
B6 Client care		√	√			√			√
B7 CPD					√		√		√

1.10 Reading List

Unit 1 – The Construction Environment

Ashworth, A., Perera, S. (2018) Contractual Procedures in the Construction Industry, 7th Edn.; Harlow: Pearson Education

CIOB (The Chartered Institute of Building) (2024) Code of Practice for Programme Management in the Built Environment, 2nd Edition; Chichester: Wiley-Blackwell. https://www.ciobacademy.org/product/code-of-practice-for-programme-management-in-the-built-environment-second-edition/

Flanagan, R., Jewell, C. (2020) Site Management and Production, London: CIOB (https://www.ciobacademy.org/product/site-management-production-guide/)

Hughes, W., Champion, R. and Murdoch, J. (2015) Construction Contracts: Law and Management, 5th Edn.; Abingdon: Routledge

Unit 2 – Construction Design Management

Eynon, John () The Design Managers Handbook; Wiley
Unwin, Simon () 25 Buildings Every Architect Should Understand
Twenty-Five+ Buildings Every Architect Should Understand | Revised and

Principal Designer CDM15 Principal Designer - CIOB Academy
BSI 8671 PAS 8671:2022 Competence of Individual Principal Designers | BSI
BSI 8672 PAS 8672:2022 Competence of Principal Contractors | BSI

Unit 3 – Construction Project Planning and Monitoring

Baldwin, A. and Bordoli, D. (2014) A Handbook for Construction Planning and Scheduling, Wiley Blackwell.

CIOB (2018) Guide to Good Practice in the Management of Time in Major Projects: Dynamic Time Modelling, 2nd Edition, London: CIOB

CIOB (2022) Code of Practice for Project Management for the Built Environment, 6th Edition, London: CIOB. https://www.ciobacademy.org/product/code-of-practice-for-project-management-for-the-built-environment-6th-edition/

Cooke, B., Williams, P. Construction Planning, Programming and Control 3rd Edition (2009) Oxford Wiley-Blackwell

Flanagan, R., Jewell, C. (2020) Site Management and Production, London: CIOB (https://www.ciobacademy.org/product/site-management-production-guide/)

Harris, F. and McCaffer R., Edum-Fotwe, F. (2013) Modern Construction Management, 7th Edition, Oxford, Wiley-Blackwell

Unit 4 – Health, Safety and Wellbeing in Construction

Building Safety legislation The Building Safety Act - GOV.UK

CIOB (2024) Building Safety Act 2022 Advice & Guidance https://www.ciob.org/industry/policy-research/resources/Building-Safety-Act-Advice-and-Guidance

Flanagan, R., Jewell, C. (2020) Site Management and Production, London: CIOB (https://www.ciobacademy.org/product/site-management-production-guide/)

Industry guidance on the following web sites: CDM Regulations 2015 http://www.cskills.org/supportbusiness/healthsafety/cdmregs/index.aspx

The Health and Safety at Work Act Health and Safety at Work etc Act 1974 - HSE

Unit 5 - Managing People and Teams in Construction

Flanagan, R., Jewell, C. (2020) Site Management and Production, London: CIOB (https://www.ciobacademy.org/product/site-management-production-guide/)

Loosemore, M. and Dainty, A. (2012) Human Resource Management in Construction, 2nd Edn; Abingdon: Routledge

Walker, A, (2015) Project Management in Construction 6th Edn. Chichester: Wiley Blackwell

Unit 6 – Construction Technology

The Building Regulations 2010 https://www.legislation.gov.uk/uksi/2010/2214/contents/made

Chudley, R. (2012) Advanced Construction Technology. 5th edn. Harlow: Pearson

Chudley, R. and Greeno, R. (2020). Building Construction 12h Edn.; Oxford: Butterworth-Heinemann

Flanagan, R., Jewell, C. (2020) Site Management and Production, London: CIOB (https://www.ciobacademy.org/product/site-management-production-guide/

Local Authority Building Control (LABC) https://www.labc.co.uk/about-labc

Unit 7 – Sustainable Construction

BRE: Sustainable Construction - Simple ways to make it happen The Site Waste Management Plans Regulations 2008

BREEAM https://breeam.com/

Chris Gorse, C. (2024) Guide to Sustainability in the Built Environment, London: CIOB https://www.ciobacademy.org/product/guide-to-sustainability-in-the-built-environment/

Fewings, P, Henjewele, C. (2019) Construction Project Management: An Integrated Approach 3rd Edn. Abingdon: Routledge

Flanagan, R., Jewell, C. (2020) Site Management and Production, London: CIOB (https://www.ciobacademy.org/product/site-management-production-guide/)

O'Brien, J. (2023) Sustainable Procurement: A Practical Guide to Corporate Social Responsibility in the Supply Chain. London: Kogan Page.

United Nations Sustainable Development Goals (UN SDGS) https://sdgs.un.org/goals

Unit 8 – Managing Quality in Construction

BS 8000 Workmanship of Building Sites ISO 9001:2015 Quality Management CIOB Code of Quality Management
Total Quality Management: Applications and Concepts for Construction Projects" by John L. W. Beckford, Published: 2022

Flanagan, R., Jewell, C. (2021) Guide to Construction Quality (Site Production and Assembly), London: CIOB (https://www.ciobacademy.org/product/guide-to-construction-quality-site-production-and-assembly/

Flanagan, R., Jewell, C. (2020) Site Management and Production, London: CIOB (https://www.ciobacademy.org/product/site-management-production-guide/)

Harris F and McCaffer R., Edum-Fotwe, F. Modern Construction Management, 7th Edition, (2013) Oxford, Wiley-Blackwell

Unit 9 – Professional Practice in Construction

Construction Ethics and Compliance - Online Course - FutureLearn
https://www.ciob.org/industry/EDI
https://www.ciob.org/industry/politics-government/campaigns/equality-diversity-inclusion
https://www.cic.org.uk/projects/essentialprinciples-guide
UK Equality Act 2010 https://www.gov.uk/guidance/equality-act-2010-guidance

Unit 1 Contents

Title	**The Construction Environment**
Unit Reference Number	**Unit 1**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Understand the economic environment of construction.	1.1 Critically evaluate economic and environmental aspects that affect the construction process.
2. Apply the principles of the legal framework.	1.2 Critically evaluate the duty holder roles and responsibilities for a range of scenarios.
3. Appraise the social impacts of construction.	1.3 Evaluate procurement methods for a range of scenarios.
	1.4 Critically evaluate the role of construction in advancing social and environmental value for given scenarios.
	1.5 Produce a stakeholder engagement plan for a given scenario.
	1.6 Review Codes of Professional Conduct for effecting cultural change in the industry.

Unit Information:

Scope:

Legal Framework – Common law and torts, statutes, byelaws, letters of intent, oral contracts, limitations and contracts under hand/deeds, remedies for non-performance including termination, damages, Bribery Act (UK)

Social Obligations – Corporate Social Responsibility, Modern Slavery, professional conduct and ethics, considerate constructors, social wellbeing

Unit 2 Contents

Title	**Construction Design Management**
Unit Reference Number	**Unit 2**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Be able to identify the information requirements for effective design management.	2.1 Critically evaluate the information requirements for a range of given scenarios.
2 Be able to use modern methods and digital technology solve design problems.	2.2 Critically evaluate drawings for mitigating design issues including clashes and flaws.
3 Be able to assess design information for feasibility.	2.3 Critically evaluate tools and methods for achieving integrated design teams.
4 Be able to design out risk.	2.4 Critically evaluate drawings and specifications for buildability.
	2.5 Critically evaluate drawings and specifications for environmental impact and whole life performance.
	2.6 Critically evaluate drawings and specifications for quality and building performance for users.
	2.7 Critically evaluate means of designing out health and safety risks for a range of given scenarios.
	2.8 Discuss the pros and cons of potential cost-saving measures for a range of given scenarios.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to manage the design of projects. It focusses on:

Planning your own and your team's workload using risk management, regulatory policies and tools to maximise performance, efficiency and compliance.

Unit 3 Contents

Title	**Construction Project Planning and Monitoring**
Unit Reference Number	**Unit 3**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Be able to assess the factors impacting on the construction process.	3.1 Critically evaluate the internal and external factors that may affect the construction process.
2. Be able to assess appropriate procurement routes.	3.2 Evaluate the information requirements for project planning.
3. Be able to sequence the works.	3.3 Evaluate risk management approaches for a given scenario.
4. Be able to select appropriate tools for project planning and monitoring.	3.4 Critically evaluate procurement routes for a range of scenarios.
	3.5 Produce a method statement for a given scenario.
	3.6 Critically evaluate a range of project management tools for a given scenario.
	3.7 Produce a programme of works for a given scenario.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to manage projects within a site team. It focusses on:

Planning your own and your team's workload using risk management, regulatory policies and tools to maximise performance, efficiency and compliance.

Unit 4 Contents

Title	**Health, Safety and Wellbeing in Construction**
Unit Reference Number	**Unit 4**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**	
1. Be able to comply with legal responsibilities under regulations.	4.1	Explain the roles and responsibilities under the Building Safety Act including the key duty holders.
2. Be able to apply technology for hazard avoidance.	4.2	Evaluate the roles and responsibilities under CDM regulations 2015 for a range of scenarios.
3. Be able to assess workplace culture for Health, Safety and Wellbeing.	4.3	Evaluate the roles and responsibilities under the Health and Safety at Work Act 1974.
4. Be able to devise methods for communicating and managing workplace hazards.	4.4	Produce a risk assessment for a given scenario covering regulations regarding construction.
	4.5	Critically evaluate the use of Modern Technologies to reduce risk on site.
	4.6	Critically evaluate the factors that affect workplace culture and propose methods for improvement.
	4.7	Critically evaluate tools for communicating and managing workplace hazards.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to manage health, safety and wellbeing for users and creators of buildings. It focusses on:

Planning your own and your team's workload using risk management, regulatory policies to reduce hazards and health and safety issues for both on site operatives and users of buildings.

Unit 5 Contents

Title	**Managing People and Teams in Construction**
Unit Reference Number	**Unit 5**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Be able to apply the principles of leading and managing people.	5.1 Critically evaluate a range of management styles.
	5.2 Apply leadership and management theories for a range of scenarios.
2. Be able to appraise methods of performance management.	5.3 Prepare a personal development plan for a range of scenarios.
	5.4 Evaluate methods for managing and motivating sub-contractors.
3. Be able to implement collaborative stakeholder engagement practices.	5.5 Critically evaluate the factors that affect the performance of construction professionals.
	5.6 Produce a stakeholder engagement plan for a given scenario.
	5.7 Evaluate improvement opportunities based on stakeholder feedback.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to manage other operatives within a site team. It focusses on:

Planning your own and your team's workload using risk management, regulatory policies and procedures to maximise performance, efficiency and compliance.
Communication and relationship management of identified stakeholders using appropriate language
Financial regulations and resource management

Unit 6 Contents

Title	**Construction Technology**
Unit Reference Number	**Unit 6**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Be able to assess a range of technologies to improve building performance.	1. Critically evaluate technologies to improve building performance and energy efficiency for a given scenario.
2. Be able to assess appropriate procurement routes.	2. Evaluate the information requirements for project planning.
3. Be able to sequence the works.	3. Evaluate risk management approaches for a given scenario.
4. Be able to select appropriate tools for project planning and monitoring.	4. Critically evaluate procurement routes for a range of scenarios.
	5. Produce a method statement for a given scenario.
	6. Critically evaluate a range of project management tools for a given scenario.
	7. Produce a programme of works for a given scenario.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to manage projects within a site team. It focusses on:

Planning your own and your team's workload using risk management, regulatory policies and tools to maximise performance, efficiency and compliance.

Unit 7 Contents

Title	**Sustainable Construction**
Unit Reference Number	**Unit 7**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Understand the impact of climate change on the Built Environment.	7.1 Critically evaluate the threats of climate change on the built environment.
2. Be able to assess carbon outputs of a built asset.	7.2 Critically evaluate methods for improving the resilience of built assets.
3. Be able to apply modern methods of construction to reduce environmental impacts.	7.3 Produce an environmental impact statement for a range of given scenarios.
4. Be able to identify suitable retrofit solutions.	7.4 Critically evaluate waste management strategies to reduce carbon.
	7.5 Critically evaluate technologies for reducing whole life carbon for a range of scenarios.
	7.6 Critically evaluate a retrofit solution for a given scenario.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to manage environmental impacts and mitigate these on construction projects.

Unit 8 Contents

Title	**Managing Quality in Construction**
Unit Reference Number	**Unit 8**
RQF Level	**6**
Credit value	**10**
Unit Guided Learning Hours	**32**
Unit Personal Study Hours	**68**
Total Qualification Time	**100**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Be able to apply quality assurance process and systems.	8.1 Produce a quality plan for a given scenario.
2. Be able to assess built assets for a range of defects.	8.2 Produce a plan to address defects for a range of scenarios.
3. Be able to apply modern technology to improve quality.	8.3 Critically evaluate the use of digital and other technologies to improve quality and maintenance of built assets over time.
4. Understand the role of building pathology and its impact on building performance.	8.4 Assess the role of building pathology in a range of scenarios affecting building performance.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to manage environmental impacts and mitigate these on construction projects. Manage Quality and mitigate defects and poor building performance

Unit 9 Contents

Title	**Professional Practice in Construction**
Unit Reference Number	**Unit 9**
RQF Level	**6**
Credit value	**5**
Unit Guided Learning Hours	**16**
Unit Personal Study Hours	**34**
Total Qualification Time	**50**

Learning Outcomes; The Learner will:	**Assessment Criteria; The Learner can:**
1. Be able to reflect on your own practice and competence.	9.1 Produce a reflective logbook on your learning.
2. Be able to apply codes of conduct in practice.	9.2 Evaluate your own strengths and weaknesses for a range of scenarios.
3. Be able to critically evaluate the challenges facing the construction industry.	9.3 Prepare a personal development plan for a given scenario. 9.4 Critically evaluate the culture of the industry. 9.5 Evaluate methods for creating a more inclusive profession.

Unit Information:

Scope:

This Unit has been designed to provide the skills necessary to develop competence and professional ethics.