

Course:	Pearson BTEC Level 4 Higher Nationals in Construction and the Built Environment	Unit/module:	1: Construction Design Project	Year:	2024-2025
Tutor:	Adewale Abimbola	Time:	32 Weeks, 1.75 hours per week		

Week No/Date	Date	Syllabus Ref	Topic	Methods of Delivery	Resources	ESW Opportunities (How will you develop Literacy, Numeracy and ILT?)	Assessment/ Student Activity	Remarks (Please note opportunities for Equality and Diversity ESDGC, Wellbeing, Curriculum Cymraeg, Enterprise, etc. and any Health and Safety issues)
1	WC 02/09/2024	L01	Topic: Introduction to unit 1 & Project Planning in Construction Sample activities: - Presentation and discussion of the unit brief, Pearson-set theme and topics for student selection. - Seminar and discussion of unit Learning Outcomes and Assessment Criteria.	T D GW CE	IWB C Handout DP	PS IT WWO	Q&A Discussion Assignment Ref	Development of research skills Incorporate sustainable design principles from the outset Develops an understanding of choices and decisions Development of academic writing skill.

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Scheme of Work

www.edulibrary.co.uk



2	WC 09/09/2024	L01	- Tutor presentation of report formats, and standards. Students should be able to develop a comprehensive project plan for a construction project. Issue Assignment 1. Discussion of submission requirements for the unit. Topic: Artificial Intelligence and Emerging Technologies in Construction Presentation on artificial intelligence and emerging technologies in construction Sample activities: Students to: - Complete Chapter One of the report: introduction, aim and objectives, significance of the project, and outline of the report. - Explore the current applications of AI in construction processes	T D GW CE	IWB C Handout DP	PS IT WWO	Q&A Discussion Group Work	Explore AI applications for improved project efficiency Consider how AI can enhance workplace safety
---	------------------	-----	--	--------------------	---------------------------	-----------------	---------------------------------	--

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



3	WC 16/09/2024	L01	Topic: Design Process Stages in Construction Sample activities: Presentation on design process stages in construction Sample activities: - Identify and describe the key stages of the design process - Analyse the activities and deliverables associated with each design stage - Evaluate the importance of stakeholder input throughout the design process. - Each student describes the stages and activities of a construction design process.	T D GW CE WS PowerPoint	IWB C Handout DP	IT WWO PS	Q&A Discussion Group Work	Engage diverse stakeholders at each stage Assess environmental impact at every design stage Consider occupant comfort throughout the design process Identify opportunities for innovation in construction methods
4	WC 23/09/2024	L01	Topic: Information Requirements in Project Stages Sample activities: Identify the types of information required at different project stages	T D WS CE PowerPoint	IWB C Handout	C IT WWO PS	Q&A Discussion	Ensure information is accessible to all team members Include sustainability metrics in project information

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



			- Analyse the flow of information between project stages - Outline the relationships between drawings, schedules and specifications.					Incorporate occupant feedback in information gathering
5	WC 30/09/2024	L01	Topic: Relationships between Drawings, Schedules, and Specifications Sample activities: - Define the purpose and content of drawings, schedules, and specifications - Analyse the interdependencies between these documents - Evaluate the importance of coordination among drawings, schedules, and specifications Each student to complete their logbook for the month of September.	T D WS CE PowerPoint	IWB C Handout	C IT WWO PS	Q&A Discussion Group Work	Ensure safety requirements are consistently reflected Explore digital tools for improved document coordination Reflect on work-life balance in logbook entries Note sustainable practices observed during the month

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



6	WC 07/10/2024	L01	Topic: Understanding and Developing Project Briefs Sample activities: Presentation on project briefs. Sample activities: - Define the concept and purpose of a project brief - Identify key components of an effective project brief - Develop a comprehensive brief for a building project proposal	T D D CE	IWB C Handout	C IT WWO PS	Q&A Discussion Group Work	Ensure brief addresses needs of diverse users Include sustainability goals in project brief Incorporate health and wellbeing objectives in brief
7	WC 14/10/2024	L02	Topic: Building Information Modelling (BIM) in Construction. Sample activities: Presentation on building information modelling (BIM) in construction. Sample activities: Students to: Assess the relationship between design and project stages and the information sharing requirements in each.	T D WS CE PowerPoint	IWB C Handout	C IT WWO PS	Q&A Discussion Group Work	Ensure BIM tools are accessible to all team members Use BIM for environmental performance simulations Explore advanced BIM features for improved efficiency .

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



			Analyse the importance of clash detection and information coordination					
8	WC 21/10/2024	L02	Topic: Design and Project Stage Information Sharing - Student to critically evaluate the relationship between design and project stages, highlighting the processes and procedures to ensure information coordination throughout. - Students may meet with tutor, individually or in groups, to discuss their projects and receive advice in support of developing final outcomes, and report. Each student to complete their logbook for the month of October.	T D WS CE PowerPoint	IWB C Handout	C IT WWO PS	Q&A Discussion Group Work	Ensure safety information is shared at all stages Consider how information sharing impacts team stress levels Implement bilingual information sharing protocols

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



9-11	WC 04/11/2024 - WC 18/11/2024	LO1&2	Topic: Assignment 1 – Independent study & support sessions Students may meet with tutor, individually or in groups, to discuss their projects and receive advice in support of developing final outcomes, and report. Submit Assignment 1. Submit Project Plan.	T CE WS Assignment Ref	C WS	IOLP PS	Assignment Ref Discussion	Development of research skill. Develops an understanding of choices and decisions Development of academic writing skills
12-20	WC 25/11/2024 - WC 03/02/2025	LO3	Topic: Computer-aided Design (CAD) Presentations on the use of Revit software to produce building. Sample activities: Students to navigate the user interface of the Revit software. use important navigation tools such as Zoom, Pan, View, Snap, produce title block sheet, produce the ground floor, add a new level, create the ground	T D GW CE WS PowerPoint	IWB C HandoutIT	C IT WWO PS	Quiz Q&A Discussion Group Work	Work collaboratively in diverse groups Development of drawing and design skills. Develop IT skill. Develops an understanding of choices and decisions

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



			and upper floor slabs of building, create railings, create walls, create the ceiling and roof, create the site, produce a rendered view, produce section drawings, produce schedules of building elements, save and export drawings as pdf files. Each student to complete their logbook for the month of November ON WC 25/11/2024. Each student to complete their logbook for the month of December ON WC 16/12/2024. Each student to complete their logbook for the month of January on WC 27/01/2025. Assignment 1 feedback					
21-22	WC 10/02/2025 & 17/02/2025	L0 3	Topic: Project Specification & Construction Health and Safety Phase Plan for the Project.	T D WS CE	IWB C Handout	C IT WWO PS	Q&A Discussion	Prioritise sustainable materials in specifications

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



			Presentation on project specification. Tutor to provide a construction health and safety phase plan template for the project. Sample activities: Students to: • Define the purpose and components of construction specifications • Analyse the role of specifications in project quality control • Develop project-specific specifications using Revit software • Produce a construction health and safety phase plan for the project. Each student to complete their logbook for the month of February.	PowerPoint				Ensure specifications meet all safety standards Explore innovative materials or methods in specifications Consider the impact of health and safety regulations on worker wellbeing.
23	WC 03/03/2025	LO 3	Topic: Assignment 2 – Independent study & support sessions Students may meet with tutor, individually or in groups, to discuss their projects and	T CE WS Assignment Ref	C WS	IOLP PS	Assignment Ref Discussion	Development of research and IT skills. Develops an understanding of choices and decisions

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



			receive advice in support of developing final outcomes, and report. Submit Assignment 2. Submit Logbook.					Development of academic writing skills
24	WC 10/03/2025	LO 4	Topic: Stakeholder Coordination and Information Sharing in Construction Sample activities: Students to: - Identify key stakeholders and their roles in construction projects - Analyse methods for effective information sharing between stakeholders - Evaluate strategies for improving coordination among different project roles	T D D CE	IWB C Handout	C IT WWO PS	Q&A Discussion Group Work	Ensure information is accessible to all stakeholders Consider stakeholder preferences in communication methods Provide Welsh language options for stakeholder communications
25	WC 17/03/2025	LO 4	Topic: Contractual Relationships and Information Flow in Construction Sample activities: Students to	T D GW CE WS	IWB C HandoutIT	C IT WWO PS	Quiz Q&A Discussion	Explore innovative contract types for improved collaboration Include sustainability requirements in contracts

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



- Identify different forms of contractual relationships in construction projects
- Explain coordination and information sharing between different roles and stakeholders in a construction project
- Analyse the ways in which different forms of contractual relationships between stakeholders influence flow of information in a construction project.
- Evaluate a package of construction information, in relation to their coordination and accuracy

PowerPoint

Ensure contracts clearly define safety responsibilities

Students may meet with tutor, individually or in groups, to discuss their projects and receive advice in support of developing final outcomes, and report.

Assignment 2 feedback

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



26 - 27	WC 24/03/2025 & WC 31/03/2025	LO 4	Topic: Performance Review in Construction Projects Presentation on the requirements of performance review in construction projects Sample activities: Students to: • Complete a comprehensive performance review document • Reflect on personal and project performance against set objectives • Identify areas for improvement and develop action plans Each student to complete their logbook for the month of March.	T D GW CE WS PowerPoint	IWB C HandoutIT	C IT WWO PS	Quiz Q&A Discussion Group Work	Reflect on personal and team wellbeing in review Assess contribution to project sustainability goals Evaluate efforts to promote inclusivity in project work
28	WC 07/04/2025	LO 4	Topic: Presenting reports - Sample activities: - Discussion of effective presentation techniques. - Support/Progress Session for presentation	T D GW CE WS PowerPoint	IWB C HandoutIT	C IT WWO PS	Quiz Q&A Discussion Group Work	Provide alternative text for images and graphics to make the presentation accessible for visually impaired individuals. Incorporate sustainability themes into your presentation design, such as using

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



			Students may meet with tutor, individually or in groups, to discuss their projects and receive advice in support of developing final outcomes, and presentation.					digital handouts instead of printed materials. Design slides with appropriate font sizes and colour contrasts to reduce eye strain for the audience Utilise PowerPoint's multimedia features to create an engaging and professional presentation.
29	WC 28/04/2025	LO 4	Topic: Assignment 3 – Independent study & support sessions Students may meet with tutor, individually or in groups, to discuss their projects and receive advice in support of developing final outcomes, and presentation. Submit Assignment 3 – PPT Presentation. Submit Performance Review document.	T CE WS Assignment Ref	C WS	IOLP PS	Assignment Ref Discussion	Development of research skill. Develops an understanding of choices and decisions Development of academic writing skills
30 - 31	WC 05/05/2025 & WC 12/05/2025	LO 4	Topic: Provide assignment 3 feedback.	T D	C IWB	C IT WWO PS	Assignment Ref Discussion	Develops an understanding of choices and decisions

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023

Scheme of Work

www.edulibrary.co.uk



			Tutor to begin to provide feedback to assignment 3 submissions.					Treat all students' submission equally and fairly.
32	WC 19/05/2025	LO1-4	Topic: Assignment Resubmissions- Independent study & support sessions Students, working individually, begin to identify resources required for their resubmission. Students may meet with their tutor, individually or in groups, to discuss their feedback on previous submissions and receive advice in support of developing assignment reports. Resubmit Assignments	T D GW CE WS PowerPoint	C IWB	C IT WWO PS	Assignment Ref Discussion	Development of critical thinking skills Development of research and literacy skills. Develops an understanding of choices and decisions

Methods of Delivery: T – Talk, D – Discussion, GW – Group Work, RL – Role Play, CE – Class Exercise, WS – Worksheet, etc

Essential & Key Skills Opportunities: C – Communications, AN – Application of Number, IT – Information Technology, IOLP – Improving Own Learning & Performance, WWO – Working With Others, PS – Problem Solving, ESDGC (Education for Sustainable Development and Global Citizenship).

Assessment: Assignment Ref, Q&A, Discussion, Group Work, Quiz, etc

Resources: IWB – Interactive Whiteboard, WB – Whiteboard, C – Computer, DP – Data Projector, F – Flipchart, TV/Video, etc.

Remarks: ESDGC, CC (This is an opportunity to plan for developing ESDGC, Curriculum Cymreig, Enterprise, Wellbeing and/or other important curriculum issues). Include any potential Health & Safety risks/hazards which could be encountered during the course of the lesson.

Revised July 2023