PROGRAMME QUALITY HANDBOOK 2025-26

Bsc (Hons) Construction and Civil Engineering

Welcome and Introduction to BSc (Hons) Construction and Civil Engineering

Welcome to BSc (Hons) Construction and Civil Engineering delivered at City College Plymouth.

This programme has been designed to equip you with the skills and knowledge base required to work in your chosen specialism or other graduate opportunities. It is also a platform from which you can undertake additional vocational and academic qualifications.

This Programme Quality handbook contains important information including:

- The approved programme specification
- Module records

Note: The information in this handbook should be read in conjunction with the current edition of:

- Your Programme Institution & University Student Handbook which contains student support based information on issues such as finance and studying at HE

- Your Module, Teaching, Learning and Assessment Guide
  - available on your programme VLE
- Plymouth University's Student Handbook
  - available at: https://www.plymouth.ac.uk/your-university/governance/student-handbook

Programme Specification

1. Programme Overview

Programme Title:	BSc (Hons) Construction and Civil Engineering
Exit Award(s):	BSc (Hons) Construction and Civil Engineering
Faculty/school/Partner:	City College Plymouth FTI
Delivery location:	Centre of technical innovation and maritime studies
Mode of delivery:	Face to face
Level of qualification:	6
Programme duration: Full/Part-time	Full time 1 academic year, Part time 2 academic years,
Programme Entry Points:	September
QAA Subject Benchmark Group(s):	Land, Construction, Real Estate and Surveying (2024) Engineering (2023)
UCAS code:	195F
HECOS code(s):	100150 (34%) Construction and the Built Environment 100149 (33%) Construction 110148 (33%) Civil Engineering

The QAA UK Quality Code for Higher Education
OfS Quality and Standards

2. **Brief description of the programme** (max 2 paragraphs):

The Bachelor of Science (Hons) in Construction and Civil Engineering is a comprehensive program that equips students with the technical knowledge and practical skills necessary to design, construct, and manage construction, civil engineering and infrastructure projects. The curriculum integrates core principles of project management, civil engineering and construction technology, professional practice, leadership, professional development and research skills, ensuring a well-rounded understanding of the field. Students gain expertise in material science, project management, research techniques, professional practice, facilities and engineering, cost control and budgeting alongside lifecycle costing and sustainable construction practices, enabling them to address modern construction and

engineering challenges. The programme emphasises hands-on learning through laboratory work, lectures, research, site visits and guest speakers providing real-world experience in the planning, execution, and maintenance of construction, civil engineering and the built environment.

Graduates are prepared for careers in the construction and civil engineering industry, government agencies, and consulting firms, with the ability to apply industry principles to create safe, efficient, and environmentally responsible projects. With a strong focus on innovation, sustainability, and emerging technologies, the degree lays the foundation for professional growth and further specialisation in construction and civil engineering disciplines.

3. Professional Accrediting Body (if applicable, and date of accreditation renewal):

In time we will be seeking accreditation with CABE and the programme has been mapped to their criteria where possible. Accreditation can only be awarded from CABE once the programme has been running for 12 months

4. Teaching and Learning (indicate how a range of teaching and learning methods are used, related to learning outcomes):

The programme employs a diverse range of teaching and learning methods to ensure students develop both theoretical knowledge and practical skills. These methods are carefully aligned with the programme's learning outcomes, preparing graduates for the demands of the construction and civil engineering industries.

1. Lectures and Seminars. Traditional lectures provide foundational knowledge in topics. Seminars are used to encourage discussion, problem-solving, and the application of theoretical concepts to real-world scenarios in small group settings. This is used across all learning outcomes and for all modules being delivered. Please refer to module records to see mapping of learning outcomes.

2. Computer-Aided Learning and Simulations. Software applications such as AutoCAD, Revit, SITE3D and MATLAB are used for structural design, analysis, and project management. Building Information Modelling (BIM) enhances students' understanding of digital construction techniques.

3. Site Visits. Regular site visits expose students to real-world construction environments, project management practices, and health and safety regulations.

4. Problem-Based Learning (PBL) and Case Studies. Working with local employers for all modules with specific focus to all learning outcomes present in Project Management module (CITY3121). The use of real-world case studies challenge students to analyse construction and civil engineering obstacles and problems alongside sustainability issues, and innovative construction techniques. Group projects simulate professional engineering challenges, fostering teamwork and critical thinking.

5. Workshops and Industry Guest Lectures. Sessions led by industry professionals provide insights into emerging trends, regulations, and practical challenges in construction and civil engineering. Workshops focus on specialised topics such as risk

assessment, environmental impact, and project financing. Present across all learning outcomes.

6. Independent Study and Research Projects. Particularly evident in the student research focussed Individual Project of CITY3119 but present for all modules. Students undertake research based projects, encouraging self directed learning and the application of engineering methodologies. The project allows students to investigate a construction or civil engineering problem, design a solution, and present their findings.

7. Assessments and Feedback Mechanisms. A range of assessment methods used to include coursework and presentation / practicals to reflect industry practice. This allows a test of knowledge, application of knowledge, presentation skills alongside problem solving abilities.

This teaching approach ensures that all programme graduates are well prepared to tackle the technical, managerial, and sustainability challenges in construction and civil engineering, equipping them with the skills required for successful careers in the field.

5. <u>Assessment methods</u> <u>(indicate how a range of assessment methods are used to enable students to demonstrate the intended learning outcomes):</u>

			Assessment 1		*Assessment 2*	
Module Code	***Module Title***	***Credits***	***Type of Assessment (& Weighting)***	***Date of submission***	***Type of Assessment (& Weighting)***	***Date of submission***
CITY3119	Individual Project	40	Assignment 1 Presentation (30%)	Semester 1 November	Assignment 2 Coursework (70%)	Semester 2 May
CITY3120	Project Management	20	Assignment 1 Coursework (50%)	Semester 1 January	Assignment 2 Presentation (50%)	Semester 2 May
CITY3121	Professional development	20	Assignment 1 Coursework (50%)	Semester 1 December	Assignment 2 Presentation (50%)	Semester 2 April
CITY3122	Construction and civil engineering management	20	Assignment 1 Coursework (50%)	Semester 1 January	Assignment 2 Presentation (50%)	Semester 2 April

CITY3123	Construction and civil engineering leadership and professional practice.	20	Assignment 1 Presentation (50%)	Semester 2 February	Assignment 2 Coursework (50%)	Semester 2 May

A variety of assessment methods are used in the programme to ensure that students can demonstrate their knowledge, technical skills, problem solving abilities, and professional competencies. These methods are aligned with the intended learning outcomes and provide a balanced approach to evaluating both theoretical understanding and practical application. The mix of assessment methods used include coursework in the format of research lead reports and presentations and practicals. These methods reflect the necessary knowledge skills and behaviours required of the professional industry of construction and civil engineering. Programme and module learning outcomes below are aligned directly with the assessment method chosen. The assessment methods allow for testing of academic knowledge, analytical and critical thinking skills, technical writing and communication skills alongside the implementation of legislation, teamwork and management skills alongside delegation and time management. All key skill requirements of industry.

Formative assessment methods present in all modules at checkpoints to reflect modular delivery dates. This includes in class tests, quiz and debate sessions, tutorials (discussed in further detail later and details contained within module record document).

Summative assessment methods include:

CITY3119: short presentation of project proposal (30%) and research project coursework (70%)

CITY3120; (50%) 3000 word coursework report on project management and 50% practical presentation to reflect the application of project management in practice.

CITY3121: (50%) personal development planning portfolio to reflect industry CPD requirements and (50%) interview that mimics industry professional accreditation method and assessment of competency.

CITY3122 (50%) 3500 word coursework report portfolio into costing and management of projects. (50%) practical presentation to reflect risk management and procurement approaches in construction and civil engineering. Reflecting a process common to industry of discussing the best approaches to projects.

CITY3123 (50%) 3500 word research based essay reflecting industry practice and management approaches. (50%) 20 minute practical presentation to reflect business planning, growth strategies, innovation and ethical decision making drivers in construction and civil engineering. Exams not used as an assessment method as the chosen methods are a truer reflection of industry and more meaningful to learners and employers. This continues to celebrate the relationships between construction and civil engineering and the transient nature of the industries. Continuous and meaningful feedback from instructors, peers, and industry professionals supports learning and improvement.

6. Admissions Criteria:

Minimum entry qualifications for this programme are as follows:

All applicants must have GCSE (or equivalent) Maths and English at Grade 4/C or above.

Any additional requirements to be listed below:

Progression from Level-5 Study	Students may apply from Level 5 programmes. Either progression will be already defined within the Programme Specification of those Level 5 programmes in cognate subjects (such as FdSc Construction or FdSc Civil Engineering) or they will be considered by admissions tutors on individual merit, based on prior construction and/or civil engineering-focused study at Level 5 and its alignment with setting the individual student up for completion to meet the PILOs of this programme.
APEL/APCL[1]	Prior Certificated Learning and Prior Experiential Learning are two broad ways a potential student may wish to present their applicability to join this Level 6, top-up programme. APEL/APCL will be considered as per Plymouth University regulations, which includes the possibility to APL 240 credits against a 360 credit BSc (Hons) degree. For mapping either APCL or APEL the admissions tutor for the relevant college should refer to the learning outcomes of their Level 5 programmes that have progression to this top-up agreed. Where that isn't immediately applicable, the admissions tutor may consider Level 5 programmes from other colleges that deliver this Level 6 top-up programme.

[1] Accredited Prior Learning and Accredited Prior Certificated Learning

Programme Structure

Stage 1 Full Time				
Module Code	Module Title	No. of Credits	Core/Optional	Semester
CITY3119	Individual Project	40	Core	All Year
CITY3120	Project Management	20	Core	All Year
CITY3121	Professional Development	20	Core	All Year
CITY3122	Construction and Civil Engineering Management	20	Core	All Year
CITY3123	Construction and Civil Engineering Leadership and Professional Practice	20	Core	All Year

Stage 1 Part Time				
Module Code	Module Title	No. of Credits	Core/Optional	Semester
CITY3119	Individual Project	40	Core	All Year
CITY3123	Construction and Civil Engineering Leadership and Professional Practice	20	Core	All Year
Stage 2 Part Time				
CITY3120	Project Management	20	Core	All Year
CITY3121	Professional Development	20	Core	All Year
CITY3122	Construction and Civil Engineering Management	20	Core	All Year

Programme structure:

Full time:

All year delivery with a “long and thin” delivery method. Although a “short and broad” delivery method was discussed, from a pedagogy approach is based on;

- Interleaved Learning (Spacing Effect). Learning multiple subjects over time rather than cramming helps with long-term retention. The spacing effect shows that revisiting topics intermittently strengthens memory and understanding.
- Interdisciplinary Connections. Many degree programs aim to integrate knowledge from different fields. Studying five modules simultaneously allows students to see connections between subjects, improving critical thinking and application skills.
- Diverse Skill Development. By engaging with different modules, students develop a range of competencies—for example, research skills in one module, technical skills in another, and critical analysis in another.

Part time:

Alongside the above the programme is offered over a part time route which consists of a 60/60 credit split with 60 credits delivered in year one and 60 delivered in year 2. This allows a split workload across the two years and evenly splits academic load.

7. Programme Aims:

The general aims of the programme are to:

To provide structured teaching, learning and assessment to enable students’ development to be assessed in line with the context of integrating technologies for engineered solutions[2].

Aim 1. Use of logical and practical steps within a pragmatic and systematic approach to turn, often complex, concepts into reality

Aim 2. Flexible use of learner skills, knowledge and understanding to develop strategies for creative and innovative approaches to construction and civil engineering problem solving and the seeking of sustainable solutions

Aim 3. Use of numerical, computational, analytical and technical skills and appropriate tools to both describe and develop potential construction and civil engineering solutions

Aim 4. Awareness of ethical, social, cultural, environmental, health and safety, and wider professional responsibilities such as engagement with developing technologies, including being risk, cost and value-conscious

Aim 5. familiarity of the nature of business and enterprise in their economic and social value, and appreciation of the global dimensions of engineering, commerce and communication

Aim 6. An understanding of the personal, financial and business tools required in construction and civil engineering businesses to meet local and global targets leading to business success.

[2] Closely paraphrased from: QAA Subject Benchmark Engineering, February 2015, section 3 ‘The characteristics of engineering graduates’

8. Programme Intended Learning Outcomes

Programme learning outcomes developed in line with the Chartered Institute of Building (CIOB) educational framework and the Institution of Civil Engineers (ICE) guidelines for developing degree programmes. PILOs linked to IET academic requirements where possible. The learning outcomes have been mapped to the CABE core competency framework and membership competency framework throughout. Following the introduction of Flex 8670 and the UK Standard for Professional Engineering Competence and Commitment (UK-SPEC) Fourth Edition, the Membership and Professional Standards Committee has introduced an updated CABE Membership Competency Framework (December 2022) designed to incorporate these new requirements and this framework has been followed where possible.

9.1 Knowledge and Understanding			
LO	On successful completion of the named award, students will be able to:	**Module Code(s)**	**Module Learning outcomes**
1.	Apply and appraise the scientific, mathematical and statistical principles underpinning application of current technologies, and their evolution, in construction and civil engineering.	CITY3119	1. Demonstrate critical knowledge and understanding of specialist construction and engineering/disciplinary topics and the fundamental principles of science, mathematics, statistics, resources and processes specifically relevant to enabling them to be investigated. 2. Critically defend their project-based inquiry of construction or civil engineering problems through analysis, application and evaluation of extant information and techniques, procedures and

		CITY3122	methods relevant to the chosen topic. 1 - Apply Costing and Measurement Techniques to demonstrate the ability to accurately apply costing, valuation, and measurement techniques, including the use of New Rules of Measurement (NRM), in construction and civil engineering projects to ensure proper financial management and project planning.
2.	Interpret the product placement, management, project-management, professional conduct, risk and legislation, quality and sustainability as appropriate to global industry within its specific landscape of Political, Economic, Social, Technological, Legal and Environmental factors.	CITY3119 CITY3120	4. Communicate professionally through project reporting of an engineering problem and their empirical investigation of it, and personal reflection of their professional development through their undertaking of it. 1.Demonstrate critical knowledge and understanding of project management and specific techniques that are contemporary within the construction and civil engineering sector, and its positioning within wider business considerations.

		CITY3123	2 - Procurement, Risk, and Frameworks Assess and implement procurement strategies, risk management techniques, and industry frameworks to enhance operational efficiency, compliance, and sustainable business practices. 3. Programme and Business Management. Develop and execute programme planning and management strategies, integrating knowledge of business structures, employment law, and professional body regulations to ensure effective project delivery. 4 - Marketing, Innovation, and Business Development Design and critically analyze marketing strategies that incorporate innovation and business development principles, demonstrating their

			impact on competitive positioning and growth 5 - Legal, Insurance, and Professional Responsibilities Evaluate the role of insurance, employment law, and professional standards in business operations, applying legal and ethical considerations to decision-making and risk mitigation.
3	Select, justify and appraise relevant materials, equipment, tools, processes, products and practice to be employed within workshop and laboratory practice.	CITY3119	1. Demonstrate critical knowledge and understanding of specialist construction and engineering/disciplinary topics and the fundamental principles of science, mathematics, statistics, resources and processes specifically relevant to enabling them to be investigated.
4	Examine the merging of technologies that form the breadth of global construction and civil engineering industries and offer future opportunities for engineers, markets and societies alike.	CITY3121 CITY3122	1. Evidence critical understanding of professional development and alignment with the needs of industry and the wider value of engineering. 3 - Evaluate Strategic and Operational Decisions and critically assess

		CITY3123	and apply strategic and operational management principles, including risk management and procurement strategies, to real-world construction project scenarios. 4. Marketing, Innovation, and Business Development: Design and critically analyse marketing strategies that incorporate innovation and business development principles, demonstrating their impact on competitive positioning and growth.
9.2 Cognitive and Intellectual skills			
LO	On successful completion of the named award, students will be able to:	**Module Code(s)**	**Module Learning outcomes**
1.	Evaluate information sourced from academic and technical literature and other sources.	CITY3121 CITY3119	3. Reflect on own experiences and education in line with key employment skills and attributes. 2. Critically defend their project-based inquiry of construction or civil engineering problems through analysis, application and evaluation of extant information

			and techniques, procedures and methods relevant to the chosen topic.
2.	Identify, review and select techniques, procedures and methods relevant to construction and civil engineering.	CITY3119 CITY3120 CITY3122	2. Critically defend their project-based inquiry of construction or civil engineering problems through analysis, application and evaluation of extant information and techniques, procedures and methods relevant to the chosen topic. 2. Critically analyse and evaluate their application of project management techniques to implement design solutions 4. Implement Innovation and Facilities Management Practices: Evaluate and apply innovative construction methods and technologies, alongside facilities management principles, to optimise the management and operation of built assets throughout their lifecycle.
3.	Analyse developed knowledge and understanding through projects in order to implement design solutions and contribute to	CITY3120	2. Critically analyse and evaluate their application of project management techniques to

	their evaluation for construction and civil engineering industries	CITY3122	implement design solutions 4. Implement Innovation and Facilities Management Practices: Evaluate and apply innovative construction methods and technologies, alongside facilities management principles, to optimise the management and operation of built assets throughout their lifecycle.
9.3 Practical and Employment related skills			
LO	On successful completion of the named award, students will be able to:	**Module Code(s)**	**Module Learning outcomes**
1.	Demonstrate ability to conduct and manage themselves through personal and team programmes of work with the ability to communicate professionally.	CITY3119 CITY3121 CITY3120	4. Communicate professionally through project reporting of an engineering problem and their empirical investigation of it, and personal reflection of their professional development through their undertaking of it. 5. Communicate verbally professional goals, well aligned with their experience and education 3. Apply problem solving skills and resources, act appropriately and communicate professionally, in their project management

			of engineering problems
		CITY3123 CITY3123	1. Leadership and Collaborative Practice Critically evaluate and apply leadership theories and collaborative practices needed to manage teams effectively, demonstrating innovation and strategic decision-making in professional and business environments. 5 - Legal, Insurance, and Professional Responsibilities Evaluate the role of insurance, employment law, and professional standards in business operations, applying legal and ethical considerations to decision-making and risk mitigation.
2.	Apply problem-solving skills, including engagement with and effective use of IT applications and facilities.	CITY3119 CITY3120	4. Communicate professionally through project reporting of an engineering problem and their empirical investigation of it, and personal reflection of their professional development through their undertaking of it. 3.Apply problem solving skills and resources, act

			appropriately and communicate professionally, in their project management of engineering problems
3.	Prepare, plan and carry out autonomous work.	CITY3121 CITY3119	3. Reflect on own experiences and education in line with key employment skills and attributes. 4. Communicate professionally through project reporting of an engineering problem and their empirical investigation of it, and personal reflection of their professional development through their undertaking of it.
4.	Identify and manage financial and project controls in construction and civil engineering projects	CITY3122 CITY3123	2 - Manage Project Finances Effectively: Analyse and manage key financial aspects such as cash flow, project financing, and cost control, ensuring the effective financial management of construction projects. 3 - Programme and Business Management to develop and execute programme planning and management strategies, integrating knowledge of business structures, employment law, and professional body regulations to ensure effective

			project delivery.
9.4 Key and Transferable skills			
LO	On successful completion of the named award, students will be able to:	**Module Code(s)**	**Module Learning outcomes**
1.	Appraise and apply appropriate codes of practice and industry standards	CITY3121 CITY3123	3. Reflect on own experiences and education in line with key employment skills and attributes. 5 - Legal, Insurance, and Professional Responsibilities Evaluate the role of insurance, employment law, and professional standards in business operations, applying legal and ethical considerations to decision-making and risk mitigation.
2.	Synthesise considerations of business, customer and user needs alongside the wider construction and civil engineering context, public perception and aesthetics	CITY3119	3. Create and/or adapt engineering solution(s) and synthesise them in line with the project purpose and its findings within the context of business, customer or user needs and the wider engineering context.
3.	Recognise and reflect on professional development so as to target their lifelong learning within the working environment.	CITY3121 CITY3119	4. Strategically plan for their future career(s), including aspects of lifelong learning and professional development. 4. Communicate professionally through project reporting of an

			engineering problem and their empirical investigation of it, and personal reflection of their professional development through their undertaking of it.

9.5 Practical Skills			
LO	On successful completion of the named award, students will be able to:	**Module Code(s)**	**Module Learning outcomes**
1.	Identify appropriate equipment and work safely and competently within a workshop or laboratory environment.	CITY3121 CITY3119	2. Safely engage with the technical application of knowledge and skills in workshop or laboratory environments. 2. Critically defend their project-based inquiry of engineering problems through analysis, application and evaluation of extant information and techniques, procedures and methods relevant to the chosen topic.
2.	Synthesise information that may be incomplete or uncertain to monitor, analyse and evaluate construction and civil engineering related systems in practice.	CITY3119 CITY3120	2. Critically defend their project-based inquiry of engineering problems through analysis, application and evaluation of extant information and techniques, procedures and methods relevant to the chosen topic. 4. Be productive in how they work with information that may be incomplete or

			uncertain to create project management solution
3.	Compose and compare design and management solutions for construction and civil engineering problems.	CITY3119 CITY3120 CITY3123	3. Create and/or adapt engineering solution(s) and synthesise them in line with the project purpose and its findings within the context of business, customer or user needs and the wider engineering context. 4. Be productive in how they work with information that may be incomplete or uncertain to create project management solution 2 - Procurement, Risk, and Frameworks Assess and implement procurement strategies, risk management techniques, and industry frameworks to enhance operational efficiency, compliance, and sustainable business practices. 3 - Programme and Business Management Develop and execute programme planning and management strategies, integrating knowledge of business structures,

			employment law, and professional body regulations to ensure effective project delivery

9. Placement Opportunities (if applicable):

N/A

10. Any additional costs:

Not Applicable

11. Non-standard regulations and date approved:

Not applicable

12. Progression opportunities:

The programme in itself is a progression route for learners from the pre-existing level 5 foundation degrees in construction and civil engineering respectively.

Progression from the programme can be onto higher education with alternative providers, such as the University of Plymouth MSC civil engineering. No direct progression routes have been formally agreed with alternative providers to date.

13. Transitional arrangements for existing students (if applicable):

Not Applicable

14. Additional points

Not Applicable

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. ***Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.***

MODULE CODE: CITY3120 **MODULE TITLE: Project Management**

CREDITS: 20 **FHEQ LEVEL: 6** **HECOS CODE(S) [max 3 with % weightings]:**
100150 (34%) Construction and the Built Environment
100149 (33%) Construction
110148 (33%) Civil Engineering

PRE-REQUISITES: N/A **CO-REQUISITES: N/A**

COMPENSATABLE: Y

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

Providing students the opportunity to understand, develop and grow their understanding of project management in construction and civil engineering. This module enables students to develop their own critical knowledge and understanding of and the ability to employ project management theory in construction and civil engineering context(s).

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework) Individual	50%	**P1** (Practical**)** Individual	50%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1** (Remotely Delivered Assessmen t)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Engineering

Professional body minimum pass mark requirement: N/A

MODULE AIMS:

- To present academic and industrial understanding of project management methodology, techniques and tactics.
- To offer prescribed problems that enable students to employ engineering project management to

present a balanced and synthesised evaluation of that activity.
- Enable students to employ gained knowledge and skills in the critical evaluation of case studies.
- Enable the development and evidencing of written and verbal communication skills, through the evaluation of theory to practice.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	**Programme Intended Learning Outcomes (PILOs) contributed to**
1. Demonstrate critical knowledge and understanding of project management and specific techniques that are contemporary within the construction and civil engineering sector, and its positioning within wider business considerations.	9.1.2 Interpret the product placement, management, project-management, professional conduct, risk and legislation, quality and sustainability as appropriate to global industry within its specific landscape of Political, Economic, Social, Technological, Legal and Environmental factors.
2. Critically analyse and evaluate their application of project management techniques to implement design solutions	9.2.2.Identify, review and select techniques, procedures and methods relevant to construction and civil engineering. 9.2.3.Analyse developed knowledge and understanding through projects in order to implement design solutions and contribute to their evaluation for engineering industries
3. Apply problem solving skills and resources, act appropriately and communicate professionally, in their project management of construction and civil engineering problems	9.3.1 Demonstrate ability to conduct and manage themselves through personal and team programmes of work with the ability to communicate professionally. 9.3.2 Apply problem-solving skills, including engagement with and effective use of IT applications and facilities.
4. Be productive in how they work with information that may be incomplete or uncertain to create project management solutions.	9.5.2. Synthesise information that may be incomplete or uncertain to monitor, analyse and evaluate engineering related systems in practice. 9.5.3. Compose and compare design and management solutions for construction and

	engineering problems.

DATE OF APPROVAL: 23/05/2025	**FACULTY/OFFICE: Partnerships -Academic Registry**
DATE OF IMPLEMENTATION: 01/09/2025	**SCHOOL/PARTNER: City College Plymouth**

DATE(S) OF APPROVED CHANGE: TBC	**SEMESTER: Semester 1 & 2**
MODE OF DELIVERY: campus taught	**Campus; TIMS**

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be published on the website as a guide for prospective students. Further details for current students should be provided in module guidance notes.

ACADEMIC YEAR: 2025/26
NATIONAL COST CENTRE: 115
MODULE LEADER: Dan Burnard
OTHER MODULE STAFF: Gursewak Aulakh, Prashant Shah

Summary of Module Content

Project management principles and the varying foci, benefits and disadvantages, and timeline of the development of different project management models, systems and techniques. Illustrative examples: Total Quality Management, Waterfall, PRINCE2, Scrum. Lean manufacturing and the development to and rise of Agile as a philosophical base for project management. Industry perspectives on project management to reach engineered solutions. Critical analysis of case studies using theory and evidence-based literature. Engagement with project management methodologies within a Lean/Agile philosophy and approach to present a project management outline for a given scenario.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lectures	35	Covering project management as employed across scales and foci of engineering industries, as well as theories, models and methods for project management.
Tutorials	5	In-class development of individual or group project management, and including formative assessment in the form of discussion groups
Seminars	5	Guest speakers from industry.
Directed Individual Study	20	Task directed activities, such as specific reading/VLE activities
Self-directed Individual Study	135	Background reading to develop critical understanding of theory, and assessment work
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	**Component Name & associated ALO**	**Component Weighting**

Coursework	Sectioned Essay/Report: 3000 words (not including tables, figures, in-text references) synthesising project-management theory and industry recognised methodologies in line with an individually chosen construction and civil engineering application case study. LO1, LO2,	100%

Practical	Project Management Presentation: synthesis of learnt project management theory with project management of an actual construction and civil engineering problem and solution. LO3, LO4,	100%

REFERRAL ASSESSMENT

Element Category	**Component Name**	**Component Weighting**
Coursework	LO1, LO2, Report: Synthesising project-management theory and industrially recognised methodologies in line with a personally chosen construction or civil engineering application case study.	100%
Coursework (in lieu of the original assessment)	LO3, LO4, Case Studies Presentation by video: A presentation comparing project management case studies with the needs of the construction and engineering industries.	100%

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Dan Burnard Date: August 2025	**Approved by**: Hollie Galpin-Mitchell Date: August 2025

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. ***Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.***

MODULE CODE: CITY3121 **MODULE TITLE: Professional Development**

CREDITS: 20 **FHEQ LEVEL: 6** **HECOS CODE(S) [max 3 with % weightings]:**
100150 (34%) Construction and the Built Environment
100149 (33%) Construction
110148 (33%) Civil Engineering

PRE-REQUISITES: None **CO-REQUISITES: None**

COMPENSATABLE: Y

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

A module linked to professional body membership and CPD. A module designed to include undertaking a collection of short courses to enable students to track, document, synthesise, reflect on and evaluate their professional development in line with their learning in higher education. This professionally extends their development of their construction and civil engineering knowledge and skills whilst assessing students' ability to be critically transformative in respect to their career development.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework) Individual	40%	**P1** (Practical**)** Individual	60%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1** (Remotely Delivered Assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Construction and civil Engineering
Professional body minimum pass mark requirement: N/A

MODULE AIMS:

- To present techniques and skills for documenting professional development.
- Provide commercially styled professional development short courses in a range of relevant industrial and technical engineering areas that provide institutional certificates of attendance for documenting within professional development planning (PDP) portfolios.
- To embed the philosophy of critical reflection and transformative alignment with career development.
- To simulate the presentation of professional development for professional body recognition.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	**Programme Intended Learning Outcomes (PILOs) contributed to**
1. Evidence critical understanding of professional development and alignment with the needs of industry and the wider value of engineering.	9.1.4 Examine the merging of technologies that form the breadth of global engineering industries and offer future opportunities for engineers, markets and societies alike.
2. Safely engage with the technical application of knowledge and skills in workshop or laboratory environments.	9.5.1. Identify appropriate equipment and work safely and competently within a workshop or laboratory environment.
3. Reflect on own experiences and education in line with key employment skills and attributes.	9.2.1. Evaluate information sourced from academic and technical literature and other sources. 9.3.3. Prepare, plan and carry out autonomous work. 9.4.1. Appraise and apply appropriate codes of practice and industry standards
4. Strategically plan for their future career(s), including aspects of lifelong learning and professional development.	9.4.3. Recognise and reflect on professional development so as to target their lifelong learning within the working environment.
5. Communicate verbally professional goals, well aligned with their experience and education	9.3.1. Demonstrate ability to conduct and manage themselves through personal and team programmes of work with the ability to communicate professionally.

DATE OF APPROVAL: 23/05/2025	**FACULTY/OFFICE: Partnerships -Academic Registry**
DATE OF IMPLEMENTATION: 01/09/2025	**SCHOOL/PARTNER: City College Plymouth**
DATE(S) OF APPROVED CHANGE: TBC	**SEMESTER: Semester 1 & 2**
MODE OF DELIVERY: campus taught	**Campus taught TIMS**

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be published on the website as a guide for prospective students. Further details for current students should be provided in module guidance notes.

ACADEMIC YEAR: 2025-26 **NATIONAL COST CENTRE: 115**
MODULE LEADER: Dan Burnard **OTHER MODULE STAFF:**

Gursewak Aulakh, Prashant Shah

Summary of Module Content

Continuing Professional Development principles and the maintenance of Professional Development Planning portfolios. UK Engineering Council standards for accreditation. Professional body institutions membership and registration. Parameterisation of theoretical knowledge, analytical skills, application, responsibility, transferable skills, ethics and values relevant to professional accreditation standards. Commercially styled professional short courses across technical and industrial areas of engineering.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lectures	35	Covering CPD and the areas of foci within UK Engineering Council accreditation
Tutorials	5	Including guidance with portfolios, professional body presentations and formative feedback
Short Course	80	Collection of individual short courses with certificates of attendance

Directed Individual Study	40	Directed reading & VLE activity around each short course
Self-directed Individual Study	40	Background reading to develop critical understanding. Preparation of assessment work.
Total	**200**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	**Component Name & associated ALO**	**Component Weighting**
Coursework	Personal Development Planning (PDP) Portfolio: to include detailed professional analysis of personal career and studies to date and planned CPD that aligns with career aspirations, as well as collating certificates of short-course attendance. LO1, LO2,	100%
Practical	Professional Interview: a professional interview designed to replicate the professional review process of a PSRB. LO3, LO4, LO5,	100%

REFERRAL ASSESSMENT

Element Category	**Component Name**	**Component Weighting**
Coursework	LO1, LO2, Personal Development Planning (PDP) Portfolio:	100%
Practical	LO3, LO4, LO5, Professional Interview: a professional interview designed to replicate the professional review process of a PSRB.	100%

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Dan Burnard Date: August 2025	**Approved by**: Hollie Galpin-Mitchell Date: August 2025

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. ***Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.***

MODULE CODE: CITY3119 **MODULE TITLE: Individual Project**
CREDITS: 40 **FHEQ LEVEL: 6** **HECOS CODE(S) [max 3 with % weightings]:**
100150 (34%) Construction and the Built Environment
100149 (33%) Construction
110148 (33%) Civil Engineering

PRE-REQUISITES: None **CO-REQUISITES: None** **COMPENSATABLE: N**
SHORT MODULE DESCRIPTOR: *(max 425 characters)*

A work based, industry focused or academic independent critical inquiry of an industry problem. An opportunity for learners to critically review knowledge through research to allow the student to identify a focus that may relate to the construction and civil engineering sectors. The student is guided by an academic supervisor in seeking their work to be defensible by the evidence their review of extant knowledge and own empirical work provides.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework) Individual	70%	**P1** (Practical**)** Individual	30%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1** (Remotely Delivered Assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Construction and civil engineering

Professional body minimum pass mark requirement: N/A

MODULE AIMS:

This module aims to:
- Develop students' in-depth knowledge and understanding of a specific topic through academic research and rigour,
- Study, review and critique of industry or industrial research and development, providing opportunity to engage with research methodologies,
- Integrate findings/conclusions within the context of the current state of the art of engineering knowledge and communicate their findings appropriately for their chosen project topic.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	**Programme Intended Learning Outcomes (PILOs) contributed to**
1. Demonstrate critical knowledge and understanding of specialist construction and engineering/disciplinary topics and the fundamental principles of science, mathematics, statistics, resources and processes specifically relevant to enabling them to be investigated.	9.1.1 Apply and appraise the scientific, mathematical and statistical principles underpinning application of current technologies, and their evolution, in construction and civil engineering. 9.1.3. Select, justify and appraise relevant materials, equipment, tools, processes, products and practice to be employed within workshop and laboratory practice
2. Critically defend their project-based inquiry of construction or civil engineering problems through analysis, application and evaluation of extant information and techniques, procedures and methods relevant to the chosen topic.	9.1.1 Apply and appraise the scientific, mathematical and statistical principles underpinning application of current technologies, and their evolution, in construction and civil engineering. 9.2.1 Evaluate information sourced from academic and technical literature and other sources. 9.2.2 Identify, review and select techniques, procedures and methods relevant to construction and civil engineering. 9.5.1 Identify appropriate equipment and work safely and competently within a workshop or laboratory environment. 9.5.2 Synthesise information that may be incomplete or uncertain to monitor, analyse and evaluate engineering related systems in practice.
3. Create and/or adapt construction or civil engineering solutions and synthesize them in line with the project purpose and its findings within the context of business, customer or user needs and the wider engineering context.	9.4.2 Synthesise considerations of business, customer and user needs alongside the wider construction and civil engineering context, public perception and aesthetics 9.5.3. Compose and compare design and management solutions for construction and engineering problems.

4. Communicate professionally through project reporting of an engineering problem and their empirical investigation of it, and personal reflection of their professional development through their undertaking of it.	9.1.2 Interpret the product placement, management, project-management, professional conduct, risk and legislation, quality and sustainability as appropriate to global industry within its specific landscape of Political, Economic, Social, Technological, Legal and Environmental factors. 9.3.1. Demonstrate ability to conduct and manage themselves through personal and team programmes of work with the ability to communicate professionally. 9.3.2 Apply problem-solving skills, including engagement with and effective use of IT applications and facilities. 9.3.3. Prepare, plan and carry out autonomous work. 9.4.3. Recognise and reflect on professional development so as to target their lifelong learning within the working environment.

DATE OF APPROVAL: 23/05/2025	**FACULTY/OFFICE: Partnerships -Academic Registry**
DATE OF IMPLEMENTATION: 01/09/2025	**SCHOOL/PARTNER: City College Plymouth**
DATE(S) OF APPROVED CHANGE: TBC	**SEMESTER: Semester 1 & 2**
MODE OF DELIVERY: campus taught	**TIMS**

Notes:

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Office for Students, Sector-recognised Standards
- Office for Students, Quality and Standards Conditions of Registration
- Subject benchmark statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

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ACADEMIC YEAR: 2025-26
NATIONAL COST CENTRE: 115
MODULE LEADER: Dan Burnard
OTHER MODULE STAFF: Gursewak Aulakh, Prashant Shah

Summary of Module Content

- **Develop or refine the research problem or question**
- **State aims and objectives**
- **Conduct in-depth search of literature relating to the project topic.**
- **Identify, design and undertake an investigative study of the subject matter.**
- **Analyse data and interpret research findings.**
- **Produce a written report, to include application of engineering knowledge**

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Lectures	80	Final year project research skills and guidance
Computer Workshop	20	Workshop on finding information using library resources
Project supervision	30	Meetings with project supervisor
Independent study	270	Self study
Total	**400**	**(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)**

SUMMATIVE ASSESSMENT

Element Category	**Component Name & associated ALO**	**Component Weighting**
Coursework 1	Project report/thesis including professional development reflection appendix. LO2, LO3, LO4	100%
Practical 1	Mid-year project outline viva-voce, including review of extant information on the topic and research methodology outline. LO1	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework 1	LO2, LO3, LO4 Completion of project report/thesis including professional development reflection appendix.	100 %
Coursework 2 (in lieu of the original practical assessment)	LO1 Written project-initiation outline as an exercise in effective project management and timescale and project planning	100 %

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Dan Burnard Date: August 2025	**Approved by**: Hollie Galpin-Mitchell Date: August 2025

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD. ***Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.***

MODULE CODE: CITY3122 **MODULE TITLE: Construction and Civil Engineering Management**

CREDITS: 20 **FHEQ LEVEL: 6** **HECOS CODE(S) [max 3 with % weightings]: 100150 (34%) Construction and the Built Environment**
100149 (33%) Construction
110148 (33%) Civil Engineering

PRE-REQUISITES: None **CO-REQUISITES: None**

COMPENSATABLE: Y

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

An in-depth study of management principles, costings, valuations, and measurement. New Rules of Measurement. Estimating costs, assessing project value, measuring quantities. Strategic and operational management, making strategic decisions, macro / micromanagement. Facilities management, building life cycles, infrastructure, operations, maintenance, repairs. Innovation, emerging technologies, sustainability.

ELEMENTS OF ASSESSMENT – *see Definitions of Elements and Components of Assessment*					
E1 (Examination)		**C1** (Coursework) Individual	50%	**P1** (Practical) Individual	50%
E2 (Clinical Examination)		**A1** (Generic assessment)			
T1 (Test)		**O1** (Remotely Delivered Assessment)			

SUBJECT ASSESSMENT PANEL to which module should be linked: Construction and civil engineering

Professional body minimum pass mark requirement: N/A

MODULE AIMS:

- **Develop Comprehensive Management Skills**: Equip students with a strong foundation in costings, valuations, and measurement, focusing on the practical application of New Rules of Measurement (NRM) and the ability to manage the financial and operational aspects of construction projects.
- **Enhance Strategic and Financial Decision-Making**: Foster critical skills in strategic and operational management, with a particular emphasis on financial management, including cash flow, project financing, and cost control, enabling students to make informed decisions that support project success.
- **Promote Innovation and Facilities Management Expertise**: Encourage students to explore innovative construction methods and emerging technologies, while also developing a strong understanding of facilities management principles to effectively manage the lifecycle of buildings and infrastructure.
- **Apply Management Theories to Real-World Scenarios**: Develop students' ability to critically assess and apply management theories to real-world challenges in construction and civil engineering, preparing them to lead projects and teams effectively in a dynamic, fast-paced industry.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended Learning Outcomes.

At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes (ALOs)	**Programme Intended Learning Outcomes (PILOs) contributed to**
1 - Apply Costing and Measurement Techniques to demonstrate the ability to accurately apply costing, valuation, and measurement techniques, including the use of New Rules of Measurement (NRM), in construction and civil engineering projects to ensure proper financial management and project planning.	9.1.1 Apply and appraise the scientific, mathematical and statistical principles underpinning application of current technologies, and their evolution, in construction and civil engineering.
2 - Manage Project Finances Effectively and analyse and manage key financial aspects such as cash flow, project financing, and cost control, ensuring the effective financial management of construction projects.	9.3.4 Identify and manage financial and project controls in construction and civil engineering projects
3 - Evaluate Strategic and Operational Decisions and critically assess and apply strategic and operational management principles, including risk management and procurement strategies, to real-world construction project scenarios.	9.1.4 Examine the merging of technologies that form the breadth of global construction and civil engineering industries and offer future opportunities for engineers, markets and societies alike.

4 - Implement Innovation and Facilities Management Practices: Evaluate and apply innovative construction methods and technologies, alongside facilities management principles, to optimise the management and operation of built assets throughout their lifecycle.	9.2.2 Identify, review and select techniques, procedures and methods relevant to construction and civil engineering. 9.2.3 Analyse developed knowledge and understanding through projects in order to implement design solutions and contribute to their evaluation for construction and civil engineering industries

DATE OF APPROVAL: 28/02/2025	**FACULTY/OFFICE: Partnerships -Academic Registry**
DATE OF IMPLEMENTATION: 01/09/2025	**SCHOOL/PARTNER: City College Plymouth**
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	**SEMESTER: Semester 1 & 2**
MODE OF DELIVERY: campus taught	**Campus taught: TIMS**

Notes:

Additional Guidance for Learning Outcomes:

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ACADEMIC YEAR: 2025-26
NATIONAL COST CENTRE: 115
MODULE LEADER: Dan Burnard
OTHER MODULE STAFF: Gursewak Aulakh, Prashant Shah

Summary of Module Content

- **Develop or refine the research problem or question**
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To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Dan Burnard Date: August 2025	**Approved by**: Hollie Galpin-Mitchell Date: August 2025