Module Descriptor Form

Civil and Environmental Engineering

CL305 - Construction Project Management

Module Code	CL305	**Module Title**	Construction Project Management				
Module Registrar	Murray, Dr Michael						
Other Staff Involved							
Credit Weighting	10	**Semester**	2	**Elective**	No	**Academic Level**	3
Pre-requisites							
Required for							

Module Format and Delivery (hours):

Lectures	Tutorials	Assignments	Labs	Private Study	Total
22	0	32	0	46	100

Educational Aim

This module aims to:

This course aims to introduce:
- The principles of project management within civil engineering projects.
- Tendering, Budgeting and Cost Control.
- Personal & Professional Development & Reflective Practice

Syllabus

This module will teach the following:

The planning process.
Clients & the Briefing Process.
An Introduction to Tendering, contract budgets, payments & cash flow
Site organisation and scheduling; Gannt charts to 4D planning.
Critical Path Analysis
Uncertainty in the planning process.
Resource allocation & logistics management.
Health & Safety Management (HASWA 1974 / CDM,2015)
Risk Management.
Quality Management.
Procurements & Contract Documents: ICE /NEC4/ JCT
Environmental issues: Design & Construction.
Personal Development Planning/ Initial Professional Development & Continuing Professional Development
ICE Attributes
Careers (employers) / skills / knowledge / aptitude/ Reflective Writing

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Learning Outcomes

On Completion of the module, the student is expected to be able to:

LO: 1	Debate & appraise theories and practice related to civil engineering project management
LO: 2	Describe & explain financial planning & cost control issues related to civil engineering projects.
LO: 3	Undertake planning, formulate personal learning objectives and evaluate these in relation to the mentoring experience and the 7 ICE Attributes

(UK SPEC suggests no more than 4 learning outcomes per module. Statements must be broad and be syllabus free and link in with the intended learning outcomes on the programme specifications.)

Assessment of Learning Outcomes - Criteria

Learning Outcome: **1**

	Criteria
1	Demonstrate a professional engineer understanding of health& safety / environmental / commercial risk, related to organizations & projects
2	Demonstrate a professional engineer understanding of contract / procurement / quality management, environmental management, related to organizations & projects.

Learning Outcome: **2**

	Criteria
1	An ability to understand the relationship between cash flow –liquidity-operating profit-gearing.
2	An ability to understand the tendering procedures employed by contractors-related to successful award of contracts.

Learning Outcome: **3**

	Criteria
1	Develop a reflective and self-critical awareness to assist the identification of knowledge / skills gaps and show evidence of action planning to secure new knowledge & skills
2	Discuss and critique prior learning from previous studies and activities in relation to new professional knowledge related to the mentoring experience.

Assessment Method(s) Including Percentage Breakdown and Duration of Exams

To Pass the module, students need to gain a summative mark of: 40%

Description	Semester	Start Week	Duration	Weight	Submission Week	Linked Criteria
Jigsaw	2	1		15%	5	LO 1: C1, C2 LO 3: C1, C2
Rich Picture	2	1		20%	7	LO 1: C1, C2 LO 2: C1, C2
CV & Cover Letter	2	1		15%	10	LO 3: C1, C2
Reflective Mentoring Report +	2	1		50%	11	LO 1: C1, C2 LO 2: C1, C2 LO 3: C1, C2

Principles of Assessment Feedback

PRINCIPLE 1. ASSESSMENT AND FEEDBACK PRACTICES PROMOTE EFFECTIVE STUDENT LEARNING: All four coursework assessments are “assessments for learning” rather than assessments of learning and assessment no. 2 is a self-directed group (team) project whereby the learning goals and evaluation methods are developed by the students and encapsulated in a team learning contract.

PRINCIPLE 2. ASSESSMENT AND FEEDBACK PRACTICES ARE APPROPRIATE, FAIR, AND TRANSPARENT: All three coursework assessments provide students with an opportunity to acquire knowledge and develop skills that are aligned to them taking on an identity as a professional civil engineer. The nature of the coursework assessments (Afl) encourages an emergent development of new knowledge rather than the recollection of learning that has been dispensed by the tutor. Nonetheless, the assessment criteria are clearly defined to students and exemplars are used to demonstrate the variance of standards across the marking range. Provision is made to assist students who require assistance with assessment (e.g. dyslexia) where the student has notified the department disability coordinator.
PRINCIPLE 3. ASSESSMENT AND FEEDBACK PRACTICES ARE CLEARLY COMMUNICATED TO STUDENTS AND STAFF: Students are informed verbally and in writing (including My Place) that the three coursework’s are “assessments for learning” rather than assessments of learning and as such will require them to consider prior learning and to have an active part in their knowledge construction. The coursework assessments encourage peer learning and whilst not explicitly requiring peer assessment, they do promote a cooperative learning space where questioning and discussion between students/ between students and academics, and between students & professional engineers, is fostered. The criteria and standards used to assess the student coursework’s are communicated to students before each assessment is given out .

PRINCIPLE 4. ASSESSMENT AND FEEDBACK PRACTICES ARE CONTINUOUSLY REVIEWED: The LO’s and subsequent assessment subjects are synthesised from guidance provided by the Engineering Council; the Joint Board of Moderators and two of the Professional Institutions- ICE & Instructed, vis-à-vis the seven Professional Attributes for (ICE) and the Development Objectives (IStructE). The assessment also provides an opportunity for students to consider the UOS graduate attributes related to an international outlook and ethical behaviour.
Assessment no.1 (Book reading team Jigsaw, a flipped classroom) has been developed through reflecting on student feedback from an ongoing department book club and compulsory book reading initiative. The “jigsaw” approach is a direct result of the module registrar’s participation in personal CPD (PG Certificate learning and teaching in HE).

Additional Information

Students are encouraged to attend co-curricular site visits and CE4 R workshops and to use the student ICE Attribute form to reflect and record their new knowledge and skills.

Resit Procedure

This re-examination will consist entirely of coursework submitted before the August 2026 Exam Diet.

Recommended Reading

Civil Engineering Project Management Practice

- ICE. (2020) Civil Engineering Procedure. 8th Edit, ICE, Thomas Telford.
- Neale, R.H, Neale, D. E, Paul Stephenson, P. (2016) Construction Planning (Engineering Management Series) ICE Publishing.
- Sherratt, F. (2015) Introduction to Construction Management. London. Routledge.

Personal & Professional Development

- ICE. (2024) Member Attributes, https://www.ice.org.uk/membership/attributes-for-professionally-qualified-membership
- Waterhouse, P. (2018) Initial Professional Development for Civil Engineers, 2nd Edition Thomas Telford.

Reflective Practice

- University of Hull- Overview of reflective writing- https://libguides.hull.ac.uk/reflectivewriting/vsummary
- University of Melbourne- https://students.unimelb.edu.au/academic-skills/explore-our-resources/developing-an-academic-writing-style/reflective-writing
- University of Sussex-Reflective Writing- http://www.sussex.ac.uk/skillshub/?id=476

Journals

- New Civil Engineer (NCE) Weekly Magazine of Institution of Civil Engineers. (Join as Student Member).
- The Structural Engineer (IStructE)-available via library electronic journal
- Proceedings of the Institution of Civil Engineers-Civil Engineering
- Proceedings of the Institution of Civil Engineers- Management, Procurement & Law
- Proceedings of the Institution of Civil Engineers-Engineering Sustainability
- Arup Journal- http://www.arup.com/publications/periodicals/the_arup_journal.aspx

Video resources available on UOS Planet eStream:(full list will be sent by email)

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Module Timetable

Week	Semester 1	Semester 2
0		
1		
2		
3		
4		
5		Submission 15%
6		
7		Submission 20%
8		
9		
10		Submission 15%
11		Submission 50%
E		

Date of Last Modification

11-09-2025