University of the West of Scotland

Module Descriptor

Session: 2024/25

Title of Module: Project Management			
Code: ENGG09004	**SCQF Level: 9 (Scottish Credit and Qualifications Framework)**	**Credit Points: 20**	**ECTS: 10 (European Credit Transfer Scheme)**
School:	School of Computing, Engineering and Physical Sciences		
Module Co-ordinator:	Stuart Tennant		

Summary of Module
This module introduces the generic concepts of project management for undergraduate students. The Project Management module identifies the characteristics of a project and project management skill sets. Key themes include; scope of the project, identification of stakeholder needs, management of project risks and procurement routes, project planning and control, cost analysis and financial appraisal for the project feasibility, communication networks, organizational structure, the management of time, earned value analysis, benchmarking, partnering, leadership and motivational theory, quality management and continuous improvement - all required for a successful project. The module provides students with transferable skills. This module will work to develop a number of key 'I am UWS Graduate Attributes'. Students who successfully complete this module will be knowledgeable, inquiring, problem solver, ethically minded, motivated, creative and ambitious.

Module Delivery Method					
Face-To-Face	Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning
☒	☐	☐	☐	☐	☐
See Guidance Note for details.					

Campus(es) for Module Delivery
The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
☒	☐	☐	☒	☐	☐	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	☒	Term 2	☒	Term 3	☐

Learning Outcomes: (maximum of 5 statements) **These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module.** At the end of this module the student will be able to:	
L1	Define a project and its scope and determine stakeholders and task/risk ownerships
L2	Plan, control and evaluate a project using manual feasibility techniques (e.g., critical path analysis, net present value, pay back method, cost-benefit analysis) and professional project management tools (MS Project or other similar)
L3	Demonstrate an understanding of the human, motivational and organisational issues and improvement strategies of project management
L4	Demonstrate an understanding of theoretical and practical aspects of quality management and strategies for continuous improvement
L5	Identify project risks and procurement routes to manage them and assess the project performance using earned value analysis

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF Level **9** K&U of project scope and objectives (cost, time, quality, sustainability and safety), stakeholder needs, Work Breakdown Structure, quantitative and non- quantitative feasibility techniques, such as project return on capital, payback period and DCF techniques such as NPV, IRR and AEC. K&U of network diagrams, precedence diagrams, bar charts and cumulative resource requirements including resource scheduling and cost optimization.

	K&U of Project Planning Software application for planning, monitoring and control of a project.
	K&U of earned value analysis
	K&U of project risk categories. Procurement routes and their approaches to risk apportionment.
	K&U of project organization types, motivation theories, team working and communication.
	K&U of Performance Management concepts such as KPIs, re-engineering, value engineering and performance measurement.
Practice: Applied Knowledge and Understanding	SCQF Level **9** As 40% of the assessment is an individual coursework of their own choice, students have an ideal platform to demonstrate the application of the K&U of the above.
Generic Cognitive skills	SCQF Level **9** Ability to examine dynamic problems in the abstract and thus analyse them and obtain a planned and controlled solution.
Communication, ICT and Numeracy Skills	SCQF Level **9** Communication skills honed via written reports and presentations. Computer and numeracy skills developed by means of various project management techniques.
Autonomy, Accountability and Working with others	SCQF Level **9** Develop individual and group autonomy, time management, initiative and self-learning.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	
Co-requisites	**Module Code:**	**Module Title:**

*Indicates that module descriptor is not published.

Learning and Teaching
Learning and teaching activities include: (1) 30 hour-lecture; (2) 6 hour-tutorial; (3) 12 hour-planning software laboratory; and (4) 152-hour independent study. Independent study components include problem-based learning, self-study and consolidation.

(4) 164-hour independent study. Independent study components include problem-based learning, self-study, and consolidation.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	30
Tutorial/Synchronous Support Activity	6
Laboratory/Practical Demonstration/Workshop	12
Independent Study	152
	200 Hours Total

**Indicative Resources: (eg. Core text, journals, internet access)

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

VLE: Lecture and support material is contained in course notes available on the UWS virtual learning environment (VLE) platform.

Software: MS-Project or similar professional Project Management tools for Assessment / Assignment Component 1 (i.e., coursework)

Extension Resources: Consultation of the under-noted resources is recommended and material from these resources may be of benefit to the student in the assessment process:

Burke R; Project Management Planning and Control Techniques;

Lock D; The Essentials of Project Management;

Meredith J and Mantel S; Project management. A managerial approach;

(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the Student Attendance and Engagement Procedure: Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following: Please refer to the UWS Academic Engagement Procedure.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code.

Please ensure any specific requirements are detailed in this section. Module Co-ordinators should consider the accessibility of their module for groups with protected characteristics..

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	Engineering
Assessment Results (Pass/Fail)	Yes ☐ No ☒
School Assessment Board	Civil Engineering and Quality Management
Moderator	Ashwini Konanahalli
External Examiner	Yuting Chen
Accreditation Details	This module is accredited by the Joint Board of Moderators as part of BEng (Hons) Civil Engineering.
Changes/Version Number	Changes – change examination assessment component from online (unseen closed book) to the following on-campus (Unseen Closed Book Class Test) / update learning activity from 36hrs. to 48hrs. to accommodate laboratory work / update module coordinator / update external examiner. Version: Previous: 2.17 Current: 2.18

Assessment: (also refer to Assessment Outcomes Grids below)

Assessment 1 is an extensive coursework that contributes 40% to the final mark.

Assessment 2 is a 2-hour unseen closed book class test that contributes 60% to the final mark (four questions – attempt all four questions).

(N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.

(ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Assessment Outcome Grids (See Guidance Note)

Component 1							
Assessment Type (Footnote B.)	**Learning Outcome (1)**	**Learning Outcome (2)**	**Learning Outcome (3)**	**Learning Outcome (4)**	**Learning Outcome (5)**	**Weighting (%) of Assessment Element**	**Timetabled Contact Hours**
Dissertation/ Project report/ Thesis	✓	✓		✓	✓	40%	0

Component 2							
Assessment Type (Footnote B.)	**Learning Outcome (1)**	**Learning Outcome (2)**	**Learning Outcome (3)**	**Learning Outcome (4)**	**Learning Outcome (5)**	**Weighting (%) of Assessment Element**	**Timetabled Contact Hours**
Unseen Closed Book Class Test	✓	✓	✓	✓	✓	60%	2 hours
Combined Total for All Components				**100%**		**2 hours**	