

# **Module Descriptor**

Title	Project Management					
Session	2025/26	2025/26 Status Published				
Code	ENGG09004	SCQF Level	9			
Credit Points	20	ECTS (European Credit Transfer Scheme)	10			
School	Computing, Engineering and Physical Sciences					
Module Co-ordinator	S 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	On-Campus <sup>1</sup>	Hybrid <sup>2</sup>	Online <sup>3</sup>		Work -Based
Method					Learning⁴
Campuses for Module Delivery	Ayr Dumfries	<ul><li>☐ Lanarks</li><li>☐ London</li><li>☐ Paisley</li></ul>	l hire	Learr	nline / Distance ning other (specify)

<sup>&</sup>lt;sup>1</sup> Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

<sup>&</sup>lt;sup>2</sup> The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

<sup>&</sup>lt;sup>3</sup> Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

<sup>&</sup>lt;sup>4</sup> Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Terms for Module	Term 1	$\boxtimes$	Term 2	Term 3	
Delivery					
Long-thin Delivery	Term 1 –		Term 2 –	Term 3 –	
over more than one	Term 2		Term 3	Term 1	
Term					

Lear	ning Outcomes
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 Skill	s 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	SCQF9						
Understanding (K and U)	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, reengineering, value engineering and performance measurement.						
Practice: Applied	SCQF9						
Knowledge and Understanding	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	SCQF 9						
Cognitive skills	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 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 9  Develop individual and group autonomy, time management, initiative and self-learning.

Prerequisites	Module Code	Module Title		
	Other			
Co-requisites	Module Code	Module Title		

## **Learning and Teaching**

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

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.

Learning Activities  During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Student Learning 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
Please select	
Please select	
TOTAL	200

## **Indicative Resources**

# 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)

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. (2013) Project Management Planning and Control Techniques, 5th Ed. John Wiley & Sons.

Lock, D. (2014) The Essentials of Project Management, 4th. Ed. Gower publishing.

Meredith, J.R., Shafer, S.M. and Mantel, S.J., (2021) Project Management: a strategic managerial approach, 10<sup>th</sup>. Ed. Wiley.

(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 <u>Student Attendance and Engagement Procedure</u>, Students are academically engaged if they are regularly attending and participating in timetabled oncampus 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:

The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in timetabled sessions. Students will scan their attendance via the attendance scanners each time they are oncampus. Students will have attendance recorded in class and they will be expected to login to the VLE several times per week. Students who are unable to attend a timetabled learning session, due to illness or other circumstance, should notify their Programme Leader. Across the School an 80% attendance threshold is set. Students who fall below this, will be referred to the Student Success Team to see how they can be best supported in their studies.

# **Equality and Diversity**

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: <a href="UWS Equality">UWS Equality</a>, <a href="Diversity">Diversity and Human Rights Code</a>.

Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module has lab-based teaching and as such students are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.

(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 Physical Sciences
Overall Assessment Results	☐ Pass / Fail ⊠ Graded
Module Eligible for Compensation	☐ Yes ☐ No
Compensation	If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.
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.					
Module Appears in CPD catalogue	∑ Yes ☐ No					
Changes / Version Number	2.18					
	AY2526 No changes in module delivery					
Assessment (also refer to Asse	essment Outcomes Grids below)					
Assessment 1						
Assessment 1 is an extensive co	oursework that contributes 40% to the final mark.					
Assessment 2						
Assessment 2 is a 2-hour unsee	n closed book class test that contributes 60% to the final					
mark (four questions – attempt	all four questions).					
Assessment 3						
(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.						

Component 1 LO1 LO2 LO3 LO4 LO5 **Assessment Type** Weighting of Timetabled **Assessment** Contact Element (%) Hours  $\boxtimes$  $\boxtimes$  $\boxtimes$  $\boxtimes$ Dissertation/ 40 Project report/

(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.)

Component 2							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Unseen Closed Book Class Test						60	2

Component 3							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Combined total for all components						100%	2 hours

**Thesis** 

When	Who
AY2425	MC