Module Specification

Project Management

Version: 2023-24, v2.0, 15 Mar 2023

Contents

Part 1: Information

Module title: Project Management

Module code: UFMFHA-15-2

Level: Level 5

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Engineering Design & Mathematics

Partner institutions: None

Field: Engineering, Design and Mathematics

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: See Learning Outcomes.

Outline syllabus: The module comprises the following:
Projects and project management in an industrial context; portfolios and programmes. Including understanding the need for a high level of professional and

ethical conduct in engineering projects.
Project organisation, structures, team building and human factors. Management and Leadership in projects.
Stakeholders, strategy and successful projects - understanding customer and user needs, managing strategic choices, identifying constraints including environmental and sustainability limitations.
Project planning, deconstructing a project through work-breakdown structures, task estimation, tools to manage constraints and achieve engineering objectives in project management (precedence relationships and critical path analysis).
Managing complexity: introduction to systems engineering.
Managing risk: through FMEA, Cause and effect, Fault trees, Delphi methods.
Project scheduling techniques to manage the design process: Network analysis, PERT, Critical path analysis, CPM.
Product pricing and project costing.
Project control techniques: Cost and schedule control, identification and management of cost drivers.
Project Management strategies in an organisational context, protecting your ideas and IP.
Project delivery, completion and appraisal.

Part 3: Teaching and learning methods

Teaching and learning methods: Overview: Large group lecture supported by tutorial group sessions. The tutorial sessions are designed to encourage the student to pragmatically develop their domain specific competences whilst simultaneously developing professional managerial and project management skills, under tutor guidance. Study time outside of contact hours will be spent working on the group project exercise.

Scheduled learning: Students receive guidance on team dynamics and form teams. The projects proceed in parallel with lectures, to guide student centred learning. Students will be required to operate within a set of guidelines which will mandate a professional standard of record keeping at the individual and team level. Teams will

receive guidance and support during their team meetings held during the 2hr tutorials.

Independent learning: Much of the project work will be undertaken outside the supported sessions.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Show a detailed knowledge and understanding of formal project management techniques for the management of an engineering project

MO2 Demonstrate subject specific skills with respect to eliciting stakeholder requirements and developing into a working brief, resolving technical problems and delivering realistic outcomes

MO3 Demonstrate the ability to understand and respond appropriately to the issues associated with managing complex projects

MO4 Show cognitive skills with respect to eliciting, synthesizing and evaluating technical, commercial and economic data from multiple sources

MO5 Demonstrate key transferable skills in problem formulation, decision making, time management and communication

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 36 hours

Face-to-face learning = 114 hours

Total = 150

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ufmfha-15-2.html

Part 4: Assessment

Assessment strategy: The assessment is a group activity, where the students work in a team to manage an engineering project. The assessment is structured to provide regular formative feedback to students groups on their progress in the structured tutorial sessions. A peer assessment process allows students to assess the contribution of fellow group members to the team activity. The result of the peer assessment is to produce individualised marks from the group report. The importance of the weekly monitoring is to emphasise the nature of project management as a team activity where team members are dependent on each other for the success of the task.

The online test assesses understanding of underlying project management principles and concepts based on an internationally recognised project management framework. These concepts are then applied to a project management group case study.

Resit Strategy:
All students will have to redo the online project management test. Students will have to do a new task that meets the learning outcomes.

Assessment tasks:

Report (First Sit)
Description: Group project report (4000 words)
Weighting: 80 %
Final assessment: Yes
Group work: Yes
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Online Assignment (First Sit)
Description: Online project management test
Weighting: 20 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Report (Resit)
Description: Individual project report (2500 words)
Weighting: 80 %
Final assessment: Yes
Group work: Yes
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Online Assignment (Resit)
Description: Online project management test
Weighting: 20 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Mechanical Engineering and Technology {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Technology (Manufacturing) {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Technology (Vehicle Technology) {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Technology (Manufacturing) {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Technology {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Technology (Mechatronics) {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Technology (Vehicle Technology) {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Technology (Mechatronics) {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons) 2021-22

Mechanical Engineering and Vehicle Technology {Foundation} [Feb][FT][GCET][4yrs] - Withdrawn BEng (Hons) 2021-22

Mechanical Engineering and Vehicle Technology {Foundation} [Oct][FT][GCET][4yrs] - Withdrawn BEng (Hons) 2021-22

Electronics and Telecommunication Engineering {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons) 2021-22

Electronics and Telecommunication Engineering {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons) 2021-22

Instrumentation and Control Engineering {Foundation} [Feb][FT][GCET][4yrs] BEng (Hons) 2021-22

Instrumentation and Control Engineering {Foundation} [Oct][FT][GCET][4yrs] BEng (Hons) 2021-22

Instrumentation and Control Engineering {Foundation} [Feb][PT][GCET][8yrs] BEng (Hons) 2018-19

Instrumentation and Control Engineering {Foundation} [Oct][PT][GCET][8yrs] BEng (Hons) 2018-19