Module Specification

Network Infrastructure Planning

Version: 2025-26, v1.0, 19 Sep 2023

Contents

Part 1: Information

Module title: Network Infrastructure Planning

Module code: UFCE59-30-3

Level: Level 6

For implementation from: 2025-26

UWE credit rating: 30

ECTS credit rating: 15

College: College of Arts, Technology and Environment

School: CATE School of Computing and Creative Technologies

Partner institutions: University Centre Weston

Field:

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: This module is designed to allow students to combine effective project management with the technical and business requirements of an organisation to plan a large network infrastructure update.

Features: Not applicable

Educational aims: In addition to the learning outcomes this module will heavily rely on managing the priorities of multiple departments to achieve a project outcome

within a given timescale. Students will be required develop the skills to consider all involved parties to ensure that all legal, regulatory and compliancy requirements are met. Finally, students will be required to plan and justify a complex network infrastructure project and plan for its longer term, end of life schedule.

Outline syllabus: This module will combine both project management and technical planning to plan a significant network infrastructure project.

-Technical requirements (eg hardware, software, configuration)

-Challenges arising from migrating with existing systems and infrastructure

-Back out planning and disaster recovery plan

-Planning and resource management (Eg time, budgetary, personnel, third party contractors, certification)

-Technical and Project planning documentation

-Standards compliancy (eg RF, power, cabling standards, health and safety)

-Legal constraints (eg permission, building control, regulation, certification.)

-Asset and warranty management processes

-End of life process, asset disposal and environmental/ethical considerations.

-Effective communication with involved parties.

Part 3: Teaching and learning methods

Teaching and learning methods: Teaching will be conveyed through a mix of methods, encompassing in-person lectures, supplementary readings, and case

studies. Students will engage in on-campus dialogue and hands-on planning sessions, where they'll be motivated to delve into and expand on the ideas and concepts originating from lecture content.

In addition, students will receive assistance in completing planning exercises using project management tools, which will enhance their proficiency in undertaking module assignments.

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

MO1 Evaluate Business and Technical requirements to develop an informed network infrastructure upgrade strategy.

MO2 Develop an infrastructure project management plan which includes time, resources and business objectives

MO3 Develop a medium to long term planning forecast for a business scenario

MO4 Explain key legal, regulatory and applicable standards to the management of a network infrastructure project

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 224 hours

Face-to-face learning = 76 hours

Total = 300

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link

Part 4: Assessment

Assessment strategy: This module consists of a project portfolio and a 20 minute presentation:

PORTFOLIO

The portfolio will require students to design, plan and document a planned network infrastructure upgrade, producing technical, budgetary and project management documentation accompanied by a 1500 word report justifying the technical decisions made.

PRESENTATION

The presentation will require students to present a complete network infrastructure plan. Students will need to communicate the project plan, considering the technical and business objectives, in a 20-minute session made up of a 10-minute presentation followed by 10 minutes of questioning and professional discussion.

Resit opportunities will follow the same format as the first take, however consideration for a re-working of the portfolio could be made.

Assessment tasks:

Presentation (First Sit)

Description: Present a complete network infrastructure plan. 20 minutes total (10 mins presentation and 10 mins discussion).

Weighting: 30 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO4

Portfolio (First Sit)

Description: Design, plan and document a network infrastructure upgrade project.

Weighting: 70 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3

Portfolio (Resit)

Description: Design, plan and document a network infrastructure upgrade project.

Weighting: 70 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3

Presentation (Resit)

Description: Present a complete network infrastructure plan. 20 minutes total (10 mins presentation and 10 mins discussion).

Weighting: 30 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Digital and Technology Solutions (Network Engineer) {Apprenticeship-UCW} [UCW] BSc (Hons) 2023-24