Module Specification

Professional and Academic Skills

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Contents

Part 1: Information

Module title: Professional and Academic Skills

Module code: UFCFGK-30-0

Level: Level 3

For implementation from: 2023-24

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Field: Computer Science and Creative Technologies

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: Elements of professionalism:

The development of professions, monitoring, measuring and upholding professional

behaviour, professional standards, professional bodies.

Ethical principles including: accuracy and rigor; honesty and Integrity; respect for life, the public good; responsible leadership

Legal responsibilities: regulation and legislation.

The work of Engineers and Technologists:

The nature of the work of Engineers and Technologists, past and present.

The role and influence of Engineers and Technologists; ethical considerations, professionalism, health and safety, impact of socio-economic change, sustainability.

Appraisal of functional, aesthetic, technical and economic considerations in engineering and technology design

Human needs and the effects of products and systems on society

Aspects of the use and conservation of energy in relation to both the manufacture and performance of products.

Effective working and communication:

Planning and time management skills.

Information literacy: use of information research skills to access and validate information from both library and electronic sources, including professional standards of referencing.

Group work: Advantages and disadvantages of working in a group; strategies for managing a group, collaborative learning

Report writing: use of a conventional report structure; use of professional language

and style; writing for an audience, academic versus “other” writing.

Reporting experimental results: Use of spreadsheets; summarising and representing results, values and formulae, macros and “what-if” functions.

Making presentations: tools, identifying the key message, format, style, timekeeping.

Part 3: Teaching and learning methods

Teaching and learning methods: Teaching and learning in this module is designed to give the students practice in a variety of professional and academic skills to allow them to recognise where their strengths and weaknesses lie and thus to develop as reflective learners.

The module is delivered by means of lectures and workshops. In general, students are presented with underpinning ideas during lectures. These ideas are practiced, developed and consolidated through a series of directed tasks, some of which are undertaken in
groups and some undertaken individually.

In-class exercises are delivered in a workshop setting, with lecturer and peer support, and with model examples available. This provides opportunities for formative assessment and extensive tutor feedback, thus giving students the opportunity to reflect on and improve their performance.

Activity (hrs)
Contact time (72)
Assimilation and development of knowledge (148)
Presentation preparation (20)
Coursework preparation (60)
Total study time (300)

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

MO1 Demonstrate an understanding of the nature of decisions and decision-making processes and be able to identify the ethical and professional elements therein

MO2 Demonstrate an understanding of the professional responsibility of engineers and technologists in the local context and discuss the potential impact of their work on society

MO3 Make effective use of technology to address specified problems with guidance from tutors

MO4 Collect, sort and use information from a variety of sources (eg lectures, libraries, journals, internet within a well-bounded context,

MO5 Appraise the value of information gathered using pre-defined frameworks or criteria

MO6 Communicate both process and results effectively, in a variety of media (e.g. written and oral) in a narrowly defined context

MO7 Work effectively in groups, adapting their behaviour to meet their obligations to others.

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Total = 300

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/index.html

Part 4: Assessment

Assessment strategy: The assessment for this module is carefully designed to support students in developing their learning skills. The module aims to help students change their learning behaviour, and prepare them for other aspects of the course, as well as for Higher Education.

Assessment is designed to be inclusive, and to take into account the range of ability that students have at the start of the course.

Assessments are designed to provide opportunities for students to be stretched and challenged.

The assessment is designed to test understanding, application and context, rather than specific skills, thus ensuring that students cannot pass the module whilst only achieving some of the learning outcomes.

Assessing little and often encourages both engagement and attendance. The controlled conditions assessment is designed in such a way that the students can 'practice' what for many is a developing skill. Thus the first assessment is a group presentation given early in the module with controlled condition. With the formal setting of this assessment, it gives the students the opportunity to recognise their strengths and weaknesses and to improve presentation skills.

The second assessment is a Portfolio. Because of the generic nature of the learning outcomes, this module is best suited to a portfolio approach. Students will be provided with a series of individual and group tasks, which allow demonstration of the learning outcomes. One element of the portfolio is a library workbook in which the underpinning information gathering skills are assessed.

Referral assessments repeat the same pattern, where students will do 1 group presentation and 1 portfolio.

Assessment tasks:

Presentation (First Sit)

Description: Group presentation (15 minutes)
Weighting: 25 %
Final assessment: Yes
Group work: Yes
Learning outcomes tested: MO1, MO2, MO6, MO7

Portfolio (First Sit)
Description: Portfolio – to include evidence of the use of technology, information gathering, communication skills, time management etc
Weighting: 75 %
Final assessment: No
Group work: No
Learning outcomes tested: MO3, MO4, MO5

Presentation (Resit)
Description: Group presentation (15 minutes)
Weighting: 25 %
Final assessment: Yes
Group work: Yes
Learning outcomes tested: MO1, MO2, MO6, MO7

Portfolio (Resit)
Description: Portfolio – to include evidence of the use of technology, information gathering, communication skills, time management etc
Weighting: 75 %
Final assessment: No
Group work: No
Learning outcomes tested: MO3, MO4, MO5

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Automation and Robotics Engineering {Foundation} [GCET] DipHE 2023-24

Architectural Technology and Design {Foundation} [GCET] BSc (Hons) 2023-24

Mechanical Engineering and Technology {Foundation} [GCET] BEng (Hons) 2023-24

Mechanical Engineering and Technology (Vehicle Technology) {Foundation} [GCET] BEng (Hons) 2023-24

Mechanical Engineering and Technology (Mechatronics) {Foundation} [GCET] BEng (Hons) 2023-24

Mechanical Engineering and Technology (Manufacturing) {Foundation} [GCET] BEng (Hons) 2023-24

Electronics and Telecommunication Engineering {Foundation} [GCET] BEng (Hons) 2023-24

Instrumentation and Control Engineering {Foundation} [GCET] BEng (Hons) 2023-24

Automation and Robotics Engineering {Foundation} [GCET] BEng (Hons) 2023-24

Electronics and Telecommunication Engineering {Foundation} [GCET] DipHE 2023-24

Instrumentation and Control Engineering {Foundation} [GCET] DipHE 2023-24

Mechanical Engineering and Technology (Manufacturing) {Foundation} [GCET] DipHE 2023-24

Mechanical Engineering and Technology (Mechatronics) {Foundation} [GCET] DipHE 2023-24

Mechanical Engineering and Technology (Vehicle Technology) {Foundation} [GCET] DipHE 2023-24

Mechanical Engineering and Technology {Foundation} [GCET] DipHE 2023-24

Architectural Technology and Design {Foundation} [GCET] DipHE 2023-24

Instrumentation and Control Engineering {Foundation} [GCET] BEng (Hons) 2022-23