Module Specification

Emerging Technologies

Version: 2021-22, v1.0, 24 Jul 2019

Contents

Part 1: Information

Module title: Emerging Technologies

Module code: UFCFKE-30-3

Level: Level 6

For implementation from: 2021-22

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Delivery locations: University Centre Weston

Field: Computer Science and Creative Technologies

Module type: Standard

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: Module Entry requirements: If offered as CPD or stand alone

Educational aims: See Learning Outcomes

Outline syllabus: An overview of current emerging Computing technologies and concepts e.g.

Artificial intelligence

Robotics

Cloud computing

IoT

Quantum computing

Ubiquitous computing

Nanotechnology

Autonomic computing

Key areas for discussion and review :

Historical background

Future development potential

Ethical, legal and moral issues involved

Commercial considerations

The need for it and the sector/s in which it could be applied

Limiting factors

Part 3: Teaching and learning methods

Teaching and learning methods: Introductory lectures (20%) are supported by seminars (30%), case studies (5%), and practical workshops (45%). In addition this module will be supported by interactive forums and learning tools.

300 hours study time of which 108 hours will represent scheduled learning.

Independent learning includes hours engaged with essential reading, assignment preparation and completion. Student study time will be organised each week with a series of both essential and further readings and preparation for practical workshops.

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

MO1 Discuss and evaluate new and developing technologies and their application within industry On successful completion of this module students will achieve the following learning outcomes.

MO2 Identify and critically analyse the ethical, legal and moral issues associated with these technologies On successful completion of this module students will achieve the following learning outcomes.

MO3 Critically evaluate the social implications that these technologies may impose

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 192 hours

Face-to-face learning = 108 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: A range of assessment techniques will be employed to ensure that learners can meet the breadth of learning outcomes presented in this module alongside the ability to demonstrate transferable skills e.g. communication skills.

Open book examination: of the different aspects and application of the two emerging technologies researched.

Report: to include evidence of the investigation of the different aspects involved with each of the technologies, e.g. ethical, moral, legal and social issues.

Assessment components:

Examination (Online) - Component A (First Sit)
Description: Online exam (2 hours)
Weighting: 40 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1

Report - Component B (First Sit)
Description: Report (3000 words)
Weighting: 60 %
Final assessment: No
Group work: No
Learning outcomes tested: MO2, MO3

Examination (Online) - Component A (Resit)
Description: Online exam (2 hours)
Weighting: 40 %
Final assessment: Yes
Group work: No
Learning outcomes tested:

Report - Component B (Resit)

Description: Report (3000 words)

Weighting: 60 %

Final assessment: No

Group work: No

Learning outcomes tested:

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Applied Computing {Top-Up} [Sep][PT][UCW][2yrs] BSc (Hons) 2020-21