**Module Specification**

# Emerging Technologies

Version: 2023-24, v2.0, 19 Jul 2023

**Contents**

# Part 1: Information

**Module title:** Emerging Technologies

**Module code:** UFCFKE-30-3

**Level:** Level 6

**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:** 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

> **MO2** Identify and critically analyse the ethical, legal and moral issues associated with these technologies

> **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:** At both first sit and resit, 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 tasks:**

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

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

**Report** (Resit)
Description: Report (3000 words)
Weighting: 60 %
Final assessment: No
Group work: No
Learning outcomes tested:

**Examination (Online)** (Resit)
Description: Online exam (2 hours)
Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested:

## Part 5: Contributes towards

This module contributes towards the following programmes of study: