



Module Specification

Emerging Topics in Software Engineering

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Part 1: Information

Module title: Emerging Topics in Software Engineering

Module code: UFCFCD-15-M

Level: Level 7

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Delivery locations: Not in use for Modules

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: There is no prescribed syllabus for this module. Rather, four emerging research topics in software engineering will be chosen for their significance

by the module leader in conjunction with the Software Engineering Research Group for each yearly run.

For example, emerging topics may or may not relate to:

knowledge-driven requirements engineering

project management and software cost estimation

software architectures for enterprise systems and cloud computing

software testing

quality and configuration management

service-oriented software engineering

search-based software engineering

Part 3: Teaching and learning methods

Teaching and learning methods: Students will attend weekly seminars of the Software Engineering Research Group conducted by specialist visiting lecturers and/or research staff nominated by the module leader and in coordination with Software Engineering Research Group.

In addition, students will also meet as appropriate with a designated tutor who will provide context and guidance of the emerging topic in Software Engineering.

Scheduled learning:

Students will receive appropriate material in advance of the scheduled seminars to enable effective interaction during the seminars and enrich knowledge exchange between students and tutors.

Within context and guidance set by the designated tutor, students form into small groups to locate, read, and discuss the associated research material for each emerging topic in preparation for student led discussions building a corporate body of opinion, with their own arguments and perspectives on the selected topic but using a form of conferencing style, with the tutor ensuring essential omissions are

not occur. Online discussion forums will be made available via the Virtual Learning Environment (Blackboard) as will audio recordings of the weekly seminars where practical.

Independent learning: Context and guidance will be provided to students in the form of suggested 'signpost' articles for each emerging research topic, but students will be expected to carry out independent research ahead and after the scheduled seminar topic.

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

MO1 Locate relevant research articles in the software engineering literature

MO2 Conduct a review of relevant research articles in the software engineering literature

MO3 Suggest future research directions for software engineering

MO4 Show cognitive skills on research issues at an appropriate level

MO5 Demonstrate key transferable skills relating to formulating relevant research questions, progression to independent learning, and communicating research outcomes

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/modules/ufcfc-d-15-m.html) via the following link <https://uwe.rl.talis.com/modules/ufcfc-d-15-m.html>

Part 4: Assessment

Assessment strategy: The assessment strategy for this module comprises a written essay.

The essay comprises a critical review about any two of the four emerging topics in Software Engineering chosen by the student.

For each emerging topic, the essay will provide:

Significance and any problematic issues relating to the emerging topic.

Relevant research question(s) relating to the emerging topic.

Critical analysis and evaluation of sources addressing the research question(s) representing the state-of-the-art.

Conclusions.

Suggestions for fruitful future research directions.

Assessment components:

Written Assignment (First Sit)

Description: 4000 word essay

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Written Assignment (Resit)

Description: 4000 word essay

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested:

Part 5: Contributes towards

This module contributes towards the following programmes of study:

