



## **Module Specification**

### **Introduction to Scientific Research [TSI]**

Version: 2023-24, v2.0, 09 Aug 2023

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## Part 1: Information

**Module title:** Introduction to Scientific Research [TSI]

**Module code:** UFCE5D-6-3

**Level:** Level 6

**For implementation from:** 2023-24

**UWE credit rating:** 6

**ECTS credit rating:** 3

**College:** College of Arts, Technology and Environment

**School:** CATE School of Computing and Creative Technologies

**Partner institutions:** None

**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:** Not applicable

**Features:** Not applicable

**Educational aims:** This course aims to give students an introduction to scientific work and a range of research methods; to help the student to select a suitable research topic, and conduct a literature review of scientific publications. The student

will also learn how to plan research and present their ideas and findings using a suitable academic style.

**Outline syllabus:** •Introduction to research and main stages of research. Criteria of Good Research.

- Defining the Research Problem.
- Purposes of Research. Research Design.
- Example of researching in field of computer science and engineering.
- Research Ethics.
- Scientific information. Primary and secondary data sources. Working with literature and international scientific citation systems; citation indexes; etc.
- Methods of research: quantitative and qualitative.
- Research Data Types. Collection.
- Interpretation and Report Writing

### **Part 3: Teaching and learning methods**

**Teaching and learning methods:** Learning and teaching will be provided to students in two forms: lectures, practical classes and labs. During lectures, theoretical aspects of the course will be provided to students by the teaching staff. Lectures will be supported by presentation published and available to the students on e.tsi.lv under the module section.

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

**MO1** Able to obtain, analyse and use the information to formulate, explain to competently design solutions for real-world problems.

**MO2** Able to use a scientific approach to problem-solving, take responsibility and initiative, make decisions, and find creative solutions.

**MO3** Able to demonstrate organisational and time management skills, working individually or in a team, as well as being able to organise and manage communication in a professional environment, observes the principles of research. professional and general ethics.

**MO4** Demonstrate the ability to recognise the dilemmas inherent in professional practice, form balanced judgements on them, and recommend actions in conformance with good practice and within the appropriate legal requirements.

**Hours to be allocated:** 60

**Contact hours:**

Independent study/self-guided study = 48 hours

Face-to-face learning = 32 hours

Total = 80

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://readinglists.uwe.ac.uk) via the following link

<https://rl.talis.com/3/uwe/lists/DFECD391-E79B-1EB0-692F-E4D55BE0360A.html?lang=en&login=1>

## **Part 4: Assessment**

**Assessment strategy:** To assess the learning outcomes of this course, several types of activities are provided, which include:

- 1) Research written report
- 2) Presentation

Research work is carried out by students in small groups. Students will be provided with guidance on a suitable research area.

Students will write a brief literature review (including short review of at least 3 papers) in their research area.

Students are required to present / defend their work at the end of the module in a short presentation.

The resit will be a rework of the original submission.

**Assessment tasks:**

**Presentation (First Sit)**

Description: Presentation about research idea; data collection, ethical concerns, analysis and findings. (15 mins)

Weighting: 50 %

Final assessment: No

Group work: Yes

Learning outcomes tested: MO1, MO2, MO3, MO4

**Report (First Sit)**

Description: Research essay. (5500 words)

Weighting: 50 %

Final assessment: Yes

Group work: Yes

Learning outcomes tested: MO1, MO2, MO3, MO4

**Presentation (Resit)**

Description: Presentation about research idea; data collection, ethical concerns, analysis and findings. (15 mins)

Weighting: 50 %

Final assessment: No

Group work: Yes

Learning outcomes tested: MO1, MO2, MO3, MO4

**Report (Resit)**

Description: Research essay. (5500 words)

Weighting: 50 %

Final assessment: Yes

Group work: Yes

Learning outcomes tested: MO1, MO2, MO3, MO4

## **Part 5: Contributes towards**

This module contributes towards the following programmes of study:

Computer Science and Software Development {Double Degree} [Feb][FT][TSI][4yrs]  
BSc (Hons) 2020-21

Computer Science and Software Development {Double Degree} [Oct][FT][TSI][4yrs]  
BSc (Hons) 2020-21