Module Specification

Cyber Security Research Paper

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Contents

Part 1: Information

Module title: Cyber Security Research Paper

Module code: UFCE4B-60-M

Level: Level 7

For implementation from: 2022-23

UWE credit rating: 60

ECTS credit rating: 30

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Delivery locations: Frenchay Campus, Global College of Engineering and Technology (GCET)

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: The Cyber Security research paper is an opportunity for students to develop their research and synthesis skills in an area of cyber security

Features: Not applicable

Educational aims: To enable students to:

Conduct an academic intellectual exploration of a CyBOK related topic.

Demonstrate the application of technical, practical and analytical skills and knowledge acquired across the programme as a whole and through their own personal learning.

Develop self-direction and autonomous planning, time-management, evaluation and decision making skills.

Outline syllabus: There is no specific syllabus for this module as the paper is an individual piece of work, Elements of the paper production & assessment process are covered in a series of lectures & workshops at the start of the academic year. The lectures will be delivered by the module leader or their nominee, in collaboration with library staff and the supervision team. They will cover topics such as:

Choosing a research topic
The CyBOK
Research methods
Academic writing & integrity
Introducing and developing research skills
Researching the paper idea
Making use of your module leader/supervisor
Writing up
The Viva process.

Workshops will be used where appropriate to give students an opportunity to experience viva style questioning, reflect on academic integrity and other topics as appropriate, and to drive the proposal development.

Part 3: Teaching and learning methods

Teaching and learning methods: Following the lecture series, students will will have a formative feedback session on their proposal with an appropriate supervisor. Students will be expected to produce a turnitin report and a self assessment of their proposal to form the basis of discussion at this session, and use it to develop a viable strategy for their research

Suitable topics must be related to the CyBOK and must lend themselves to research

.

Each student will be assigned a supervisor who will meet them regularly to discuss progress and to give guidance on planning and managing the work. It is the student's responsibility to research material and techniques appropriate to the subject of the dissertation.

Wherever possible students will be assigned a supervisor with an interest in the topic. The responsibilities of the tutor are primarily to provide guidance on the management of the project, the standard of work required, what can realistically be done in the available time and to give feedback on work done (including the writing of the report).

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

> **MO1** Identify a research problem relevant to the CyBOK and scope research to suitably investigate it
>
> **MO2** Synthesise and critically evaluate recent research having a direct bearing on the problem space
>
> **MO3** Critically and reflectively evaluate the outcome and personal performance with respect to standards of research quality (validity, reliability), ethical considerations and professional competence.
>
> **MO4** Communicate and defend research outcomes and learning effectively

Hours to be allocated: 600

Contact hours:

Independent study/self-guided study = 588 hours

Tutor led = 12 hours

Total = 600

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://rl.talis.com/3/uwe/lists/67A16D96-EB10-217B-A6B4-D166C4EC7893.html?lang=en-US&login=1

Part 4: Assessment

Assessment strategy: The formal proposal is intended to evaluate the student's written communication skills, and their ability to formulate and justify an actionable course of research. This will be of up to but not exceeding 3000 words and should include an outline of the proposed research, a literature review, a project plan and any ethical considerations. In addition students will need to write a justification of how it aligns with the CyBOK and which CyBOK area(s), Supervisors will be formally allocated for the formative review of the proposal - the proposed work being the basis for supervisor selection.

The paper is marked on its appropriateness as an academic paper and is then assessed through viva, to address the depth of the students understanding of their topic. The written submission will be a paper (no exceeding 15-pages although potentially far shorter) formatted and presented as though intended for submission to an academic journal (the current choice being MDPI Journal of Security & Privacy). The requirement for the paper is that it presents a "concise and comprehensive" description of the work undertaken.

For resit runs, students who fail the initial sit will be provided with feedback by their supervisor and will then be expected to rework their paper and/or proprosal and resubmit it, before a further viva (of the paper).

Assessment components:

Written Assignment - Component A (First Sit)

Description: Research paper (up to 15 pages)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO2, MO4

Presentation - Component A (First Sit)

Description: Viva (30 to 45 minutes)

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO3, MO4

Report - Component B (First Sit)

Description: Formal proposal and literature review (3000 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2

Written Assignment - Component A (Resit)

Description: Research paper (up to 15 pages)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO2, MO4

Presentation - Component A (Resit)

Description: Viva (30 to 45 minutes)

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO3, MO4

Report - Component B (Resit)

Description: Formal proposal and literature review (3000 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Cyber Security [Frenchay] MSc 2022-23