

WM3B1-30 Cyber Security Project

21/22

Department

WMG

Level

Undergraduate Level 3

Module leader

Magdalena Zajackowska

Credit value

30

Module duration

30 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

A project for BSc Cyber Security must focus on the cyber security domain.

With support from their supervisor, an individual student will be expected to undertake the full life cycle of a research or development project in the cyber domain.

Some of the most worthwhile cyber projects are development projects which deliver capability as an output. Such development projects sit comfortably alongside research projects with the heart of the development question being “is the developed product fit for purpose?” This provides a unified overall pattern of project outcomes based on evidence. At the same time, it delivers the widest range of outputs and outcomes that can have real value in the cyber domain.

Module aims

- 1 - Critically evaluate the corpus of published material, formulating relevant ideas into a referenced literature review.
- 2 - Select and apply appropriate methods, tools and techniques to suit the requirements of a specific research question or development goal.
- 3 - Plan, monitor, risk manage, and report on an extended piece of research or development, utilising the time and resource to good effect and presenting findings to suit the needs of the audience.

4 - Conduct research or development in an ethically responsible manner.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

The nature of scientific research and development.

Cyber research and development methods.

Ethical considerations in cyber research and development.

Risk management of cyber projects.

Planning, managing and monitoring a cyber research or development project.

Learning outcomes

By the end of the module, students should be able to:

- 1 - Critically evaluate the corpus of published material, formulating relevant ideas into a referenced literature review.
- 2 - Select and apply appropriate methods, tools and techniques to suit the requirements of a specific research question or development goal.
- 4 - Conduct research or development in an ethically responsible manner.
- 3 - Plan, monitor, risk manage, and report on an extended piece of research or development, utilising the time and resource to good effect and presenting findings to suit the needs of the audience.

Research element

Conduct experimentation on cyber systems to determine cyber characteristics.

Human participation is not anticipated.

Development projects will not include the research element.

Subject specific skills

1 - Critically evaluate the corpus of published material, formulating relevant ideas into a referenced literature review.

2 - Select and apply appropriate methods, tools and techniques to suit the requirements of a specific research question or development goal.

3 - Plan, monitor, risk manage, and report on an extended piece of research or development, utilising the time and resource to good effect and presenting findings to suit the needs of the audience.

4 - Conduct research or development in an ethically responsible manner.

Transferable skills

Critical thinking, problem solving, communication, ethical values, professionalism

Study

Study time

Type	Required
Lectures	3 sessions of 1 hour (1%)
Project supervision	10 sessions of 1 hour (3%)
Private study	87 hours (29%)
Assessment	200 hours (67%)
Total	300 hours

Private study description

Independent student activity of approximately 284 hours

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time	Eligible for self-certification
Assessment component			
Project	100%	200 hours	No

Reassessment component is the same

Feedback on assessment

Interaction with supervisor.
Peer reviewing of other students' projects.
Receiving peer review from other students.

Availability

Courses

This module is Core for:

- Year 3 of UWMA-H651 Undergraduate Cyber Security