

Internet Security and Protocols

Module Code:	COS7023-B
Academic Year:	2018-19
Credit Rating:	20
School:	Department of Computer Science
Subject Area:	Computer Science
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	24
Tutorials	12
Laboratory	12
Directed Study	150
Examinations DO NOT USE	2

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Full Year (Sept - Aug)
BDA	University of Bradford / Semester 2 (Feb - May)

Module Aims

To develop a comprehensive understanding of the underlying technologies of computer and network security mechanisms and a critical awareness of the overhead, impact and relative value of the protection offered.

Outline Syllabus

Internet security architecture. Models for network security. Internet standards and security standards. Security protocols for Application, Transport and Network layers in TCP/IP architecture of the Internet. Security protocols for new emerging technologies such as Internet of Things and Cloud computing.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 demonstrate an understanding and mastery of the nature of security protocols within a network and the Internet.
Demonstrate a critical awareness of the performance and quality issues involved.
- 2 demonstrate skills to deal with the complex issues involved in effectively implementing a reliable and effective security protocol.
Be able to identify suitable metrics to compare security levels and develop tools for the evaluation of different protocols via modelling or analysis
- 3 deploy advanced skills of research, problem-solving and communication.
Be self-directed, independent learners who show initiative and personal responsibility.

Learning, Teaching and Assessment Strategy

Formal input provided by lectures, supported by practical examples from visiting speakers and student directed reading. Practical examples used, where appropriate, to illustrate issues raised by security protocols. Assessment is by coursework, which provides an opportunity to practise practical skills, and examination.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Examination - closed book	2 hour examination	2 hours	60%	Yes
Summative	Coursework	Coursework (5 practical projects/exercises)	-2000 words	40%	No

Legacy Code (if applicable)

CM-1064D

Reading List

To view Reading List, please go to [rebus:list](#).

