

Module Details	
Module Title:	Internet Security and Protocols
Module Code:	COS7023-B
Academic Year:	2019-20
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	152

Availability	
Occurrence	Location / Period
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.

Learning Outcomes	
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
Summative	Coursework	Lab Report (4000 words)	4000 words	100%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html .

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.