APPROVED

Awards
Honours Bachelor Degree

Mode of Delivery:	Full Time	**No. of Semesters :**	8
NFQ Level:	8		
Programme Credits:	240		
Language of Instruction:	English		
Department:	Computing and Networking		

Semester Schedules

Stage 1 / 60 ECTS / Semester 1

Mandatory	
Module Code	**Module Title**
ZAPP C1201	Applications and Interpersonal Communications
ZCOM C1201	Computer Hardware 1
ZMAT C1201	Mathematics 1
ZNTW C1201	Networking 1
ZPRG C1201	Programming 1

Stage 1 / 60 ECTS / Semester 2

Mandatory	
Module Code	**Module Title**
ZCOM C1202	Computer Hardware 2
ZMAT C1202	Mathematics 2
ZNTW C1202	Networking 2
ZPRG C1202	Programming 2
ZSYS C1201	Operating Systems

Stage 2 / 60 ECTS / Semester 1

Elective Regulation

Learners may apply to EXIT on completion of this stage of the programme with a Higher Certificate in Science in Computing and Risk Management (Level 6 Embedded Exit Award) provided they have achieved the required learning outcomes for the level 6 award and have accumulated 120 credits. IT Carlow academic regulations apply

Mandatory	
Module Code	**Module Title**
COAP	Scripting for Cybersecurity
PROG	Web Programming and Databases 1
ETHI	Ethics 2
ADMN	Systems Administration
NETW	Networking: Switching and VLAN Concepts

Stage 2 / 60 ECTS / Semester 2

Mandatory	
Module Code	**Module Title**
COAP	Assembly and C
PROG	Web Programming and Databases 2
SYST	Systems Infrastructure and Security
NETW	Networking: Wireless and Routing Concepts
SAFE	Project Incident Handling and Risk Analysis

Stage 3 / 60 ECTS / Semester 1

Elective Regulation

Learners may apply to EXIT on completion of this stage of the programme with a Bachelor of Science in Interactive Digital Art and Design (Level 7 Embedded Exit Award) provided they have achieved the required learning outcomes for the level 7 award and have accumulated 180 credits. IT Carlow academic regulations apply

Mandatory	
Module Code	**Module Title**
SYST	Penetration Testing
LAWS	Cybercrime Legislation and Compliance
PRAC	Automating Security Practice
NETW	Networking III
COAP	Cryptography

Stage 3 / 60 ECTS / Semester 2

Elective	
Module Code	**Module Title**
WKPL	Work Placement (Cybercrime)
PROJ	Project (Cybercrime)
RECH	Approved Semester Abroad

Stage 4 / 60 ECTS / Semester 1

Mandatory	
Module Code	**Module Title**
PROJ	Project (Cybercrime) (Part 1 of 2)
ANAL	Basic Malware Analysis
DIGT	Digital Forensics
SECU	Enterprise Network Security

Stage 4 / 60 ECTS / Semester 2

Elective Regulation

Two, 5 Credit elective modules must be taken in this Semester.

Mandatory	
Module Code	**Module Title**
SECU	Secure Application Development
ENGR	Reverse Engineering
PROJ	Project (Cybercrime) (Part 2 of 2)

Elective	
Module Code	**Module Title**
VISU	Data Visualisation
SCIE	Case Studies in Data Science
COAP	Cloud Data Centers
COMP	Linux Infrastructure Engineering
DATA	Data Engineering
TECH	Artificial Intelligence in the Wild
SYST	Blockchain Technology
DSGN	UI/UX Design and Development
ENTR	Entrepreneurship
FALT	Bias in Computational Systems