

Bachelor of Science with Honours in Cybersecurity – 2022 entry

Duration of programme: 4 years (where students join the programme in year 1)

Award on successful completion: Bachelor of Science with Honours

Location of delivery: Abertay University, Bell Street, Dundee

Accreditation:

Composition of the programme: 120 SCQF (Scottish Credit and Qualifications Framework) credits (60 ECTS) in each academic year, delivered in modules of 20 credits each, with 3 modules taken in term 1, and 3 in term 2 each year. A 40 credit independent project is included in the final year.

Contact hours and workload: Each academic year typically requires 1200 hours of student effort; on average across the 4 years of this programme, 25% of that time is in lectures, seminars and similar activities; the remainder is independent study.

Assessment methods: A variety of assessment methods are used, which include individual and group software projects, portfolios of practical exercises, written papers, VLE-based tests and closed-book examinations.

Academic staff: This programme is delivered by staff in the Division of Cyber Security and the Division of Games Technology and Mathematics in the School of Design and Informatics. Staff profiles can be viewed at <https://www.abertay.ac.uk/staff-search?departments=school%20of%20design%20and%20informatics>

Core modules in the programme:
Computer Hardware Architecture and Operating Systems
Software Design
Programming with C++
Introduction to Security
Data Structures and Algorithms 1
Data Structures and Algorithms 2
Ethical Hacking 1
Ethical Hacking 2
Secure Software Engineering (new)
Mathematics for Cyber Security (new)
Honours Project Planning and Execution
Honours Project Dissertation
Other modules that may be offered, but are subject to change over time:
Computer Networking 1
Application Design
Programming for the User
Software Engineering Practice
Computer Networking 2
Ethical Hacking 3
System Internals and Cyber Security
Languages and Compilers

Developments in the discipline: Programming languages, APIs, development tools and hardware used will change over time to reflect current industry practice.