

B.Sc (Hons) COMPUTING (3+0)

(MQA/PA17553) (N/0610/6/0001)

PROGRAMME DESCRIPTION

This programme is designed to provide students with a comprehensive education in computing. This programme equips students with advanced knowledge and practical skills across various computing domains, preparing them for diverse career opportunities in the technology industry. This programme also focuses on providing specialist options that meet the needs of the significant functions in computer science and allow specialization with career progression and professional recognition in mind.

CAREER PROSPECTS

- Programmer
- Software Developer
- Web Developer
- Database Administrator
- System Analyst
- IT Support Specialist
- IT manager
- Software Engineer
- Data Analyst

DURATION OF STUDIES:

3 Years (9 Semesters)

COMPULSORY SUBJECTS FOR MALAYSIAN STUDENTS

- Philosophy & current issue
- Appreciation of Ethics & Civilization
- Bahasa Kebangsaan
- Leadership skills.
- Integrity & Anti-corruption

*Students need to complete three modules from the above.

COMPULSORY SUBJECTS FOR INTERNATIONAL STUDENTS

- Bahasa Melayu Komunikasi
- Leadership Skills
- Integrity & Anti-corruption

AWARDING BODY



WHAT SKILLS WILL YOU DEVELOP?

- Graduates possess a solid understanding of fundamental concepts, theories, and principles in computer science, preparing them for advanced study or entry-level positions in the field.
- Graduates foster practical skills in programming, software development, database management, and other technical areas essential for computer science professionals.
- Graduates can analyze problems, design algorithms, and develop innovative solutions using computational thinking and logical reasoning.

PROGRAMME STRUCTURE

SEMESTER 1

- Computer Hardware Architecture and Operating System
- Programming with C++
- Being Successful at Abertay
- Successful Writing at Abertay
- Research and Enquiry Skills for the Digital Age
- How to Sell Your Ideas!

SEMESTER 2

- Software Design
- Computer Networking 1
- Fundamentals of Development and Security

SEMESTER 3

- Data Structures and Algorithms 1
- Secure Web Development

SEMESTER 4

- Application Design
- Data Structures and Algorithms 2
- Designing For the Users
- Sustainability 101
- Artificial Intelligence and Society
- Co-create (Negotiated Studies) OR
- Being Successful at University (advance entry)

SEMESTER 5

- Web Services Development
- Software Engineering Practice
- Professional Project Planning and Prototyping
- Software Development for Mobile Devices

SEMESTER 6

- Fundamentals of Machine Learning
- Professional Project Development and Delivery

SEMESTER 7

- Industrial Training

SEMESTER 8

- Enterprise System Engineering and Big Data
- IoT and Cloud Secure Development
- Advanced Topics in Computing

SEMESTER 9

- Honours Project Proposal and Execution
- Honours Project Dissertation