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UNIVERSITY OF WOLVERHAMPTON

Malta Further & Higher Education Authority
2017-TC-07

BSc (Hons) Computer Science

Year 2 & 3 of a 3 Year Degree

The course aims to produce software developers who can seamlessly make the transition from University to the international computer industry. This is achieved by providing a thorough grounding in the core principles of computer science and integrating these with computer languages, tools, techniques and methodologies used by computer professionals worldwide.

The Computer Science degree will enable you to demonstrate a knowledge and understanding of the essential facts, concepts, principles, theories and practices relating to Computer Science. The holistic approach of this programme means that students will learn how to make the best use of the appropriate tools and methodologies to the design, implementation and evaluation of software systems on a variety of platforms and environments.

In addition students will be given the opportunity to develop a range of transferable skills in such areas as problem solving, communication, project management, working individually and in teams as well as self-management and the ability to gather, synthesise, evaluate and reflect on information from relevant sources.

This degree opens the door to a number of opportunities, from programming to software testing and software engineering. Students can also choose to further their studies with a Master's degree within Computer Science or other related disciplines.

Apply now:
stcmalta.com/apply

Study Options
Full Time or Part Time

Duration
2 Academic Years
or 4 Academic Years (Part Time)
240 CATS (120 ECTS)

Assessment
Assessment through examinations and coursework assignments

Entry Requirements
Level 4 Computing Award such as:
Higher National Certificate Computing
NCC Diploma in Computing
English Language Certification

Location
STC Higher Education
Block D, Giorgio Mitrovich Street,
Pembroke, Malta

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on completion MQF Level 6 • UK Level 6

UNLOCK YOUR TRUE POTENTIAL

Year 2 of Degree

Distributed and Cloud Systems Programming

Distributed systems will be introduced using the client-server model implemented using sockets and students will implements systems that interact in this low level way. The second half of the module will look at a range of cloud technologies and culminate in a system being developed for and deployed to cloud infrastructure.

Databases

This module will provide the student with a firm grounding in the principles of Professional Databases. The topics you will study include how to design and manipulate a DBMS. The module will give students practical experience of using SQL within a modern relational database management system, such as Oracle.

Object-Oriented Design and Programming

The purpose of this module is to introduce students to the field of object-oriented design and programming, and to the utilisation of industry-standard methods and techniques for development. Students will learn about fundamental object-oriented concepts such as class design, encapsulation, inheritance, composition, abstract classes and interfaces.

Numerical Methods and Concurrency

This module begins the journey from serial programs with one thread of execution to concurrency and on to high performance computing. Students will learn about multi-threading using algorithms from numerical methods as a focus for implementation.

Human-Computer Interaction

The module will focus on the foundations of User-Centred Design and Principles of Effective Human Computer Interaction Techniques, including the conceptualisation, design, building / prototyping, testing and developing digital systems such as interfaces and emerging technological innovations.

Collaborative Development

This module aims to integrate the subject material studied in other modules and give students experience of developing an artefact in a team. Students will learn to work in teams to coordinate and manage a project.

Year 3 of Degree

High Performance Computing

This module will further develop student's knowledge and understanding of Concurrent Systems. It will cover advanced topics such as GPUs, FPGAs and computer clusters.

Emerging Interactive Technologies

This module is designed to provide students with an awareness of both current and upcoming trends/developments within the computer science industry. This includes recent technology developments, along with evolving technologies and those currently at a research stage.

Big Data

This module builds on High Performance Computing and Database modules to provide understanding and knowledge of the essential concepts, theories and practices of Big Data. This will include Distributed System, latest advances and techniques in processing and managing big data.

Artificial Intelligence and Machine Learning

This module focuses on the current and emerging area of artificial intelligence and machine learning in both domestic and commercial fields. Areas covered vary but may include Robotics, Digital Entertainment and Industries, such as Automotive and Supply chain.

Project and Professionalism

Learn about professional issues related to working in the Computing and IT industry. Students will consider professional conduct and the social, legal and ethical implications related to the profession. Students will be assigned a mentor who will be able to provide guidance and support throughout the final year project.