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Institute**

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Further and Higher Education Institution

**Malta
Campus**



MQF
MALTA QUALIFICATIONS
FRAMEWORK



(BSc.) in Software Design with Artificial Intelligence Cloud Computing

MQF Level 6 | 180 ECTS



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(BSc.) in Software Design





with Artificial Intelligence Cloud Computing

Course Overview

The BSc. in Software Design with Artificial Intelligence and Cloud Computing, spanning 180 ECTS, offers a dynamic and comprehensive curriculum, preparing students for the forefront of technology. Beginning with a solid foundation in software engineering, the program progresses to cutting-edge modules covering AI, machine learning, deep learning, and cloud computing. Emphasizing practical application through hands-on projects and Work Integrated Learning, students gain a versatile skill set, including proficiency in cloud application development, DevOps practices, and human-centered design. Graduates are equipped for diverse roles such as Software Engineer, Cloud Solutions Architect, AI/Machine Learning Engineer, and more.

The program aligns with National Occupational Standards on the Malta Qualifications Database, ensuring graduates meet or exceed industry benchmarks, and while not leading to a specifically warranted profession, it prepares students for regulated roles within the tech sector. Overall, the program empowers students to thrive in the ever-evolving field of technology, emerging as well-rounded professionals poised for impactful contributions in the IT industry.

Programme Specification

Accredited Status of Programme	Level of Qualification Awarded	Type of Qualification	ECTS Credits
Accredited	MQF Level 6	Bachelor of Science	180 ECTS
			
Programme Duration	Language of Instruction	Mode of Delivery	Class Schedule
Full-Time: 36 Months Part-Time: 48 Months	All classes will be conducted in English	Hybrid classes (subject to change)	Twice weekly, from 18:30 pm till 20:30 pm (subject to change)

Target Group

- Students aiming to build a strong foundation in software design, focusing on artificial intelligence and cloud computing technologies, and those interested in pursuing careers in software development, AI engineering, or cloud computing, seeking comprehensive education in these fields.
- Professionals currently in IT or related industries looking to specialise in AI and cloud computing to enhance their career prospects.

Entry requirements

- Students must be in possession of a minimum MQF Level 4 full qualification or higher related to Software Design, IT, or Computing
- In the case of international students, where English is not an official language, students need to demonstrate proficiency in the English language through IELTS (Score: 6.0) (International English Language Testing System) or equivalent.

Module List

Unit Name - Year 1	ECTS	MQF Level
Mathematical Foundations for Computing and Engineering	5	5
Foundations of Software Development with C++ and Python	5	5
Data Structures and Algorithms in Software Engineering	5	5
Introduction to Computer Graphics and 3D Programming	5	5
Service-Oriented Architecture and Microservices Fundamentals	5	5
Probability and Statistics Foundations with Applications	5	5
Introduction to Artificial Intelligence: Search, Logic, and Learning	10	5
Foundations of Cloud Computing	10	5
Introduction to DevOps: Principles and Practices	10	5
Unit Name - Year 2	ECTS	MQF Level
Foundations of Data Science: Principles and Tools	5	5
Foundations of Database Systems with Networking Insights	5	5
Principles of Network Architecture and Database Systems	10	5
Specialized Applications and Ethical Considerations in AI	10	5
Statistical Models for Regression and Classification	10	5
Cloud Application Development Fundamentals	10	5
Cloud Computing Techniques and Infrastructure	10	5
Unit Name - Year 3	ECTS	MQF Level
Machine Learning: Concepts and Applications	5	6
Natural Language Processing and Speech Recognition	5	6
Deep Learning: Neural Networks and Applications	5	6
DevOps Practices and Automated Workflows	5	6
Data Mining: Techniques and Visualization	5	6
Scaling and Monitoring in the DevOps Environment	5	6
Graduation Project	30	6

Is Government funding available for this qualification?

YES this course falls under the

- **GET QUALIFIED** scheme which is an initiative that supports the personal development of individuals for the achievement of qualifications and certifications required by industry. The incentive is applicable to individuals following a course of studies leading to a Certification, Diploma, Degree or Post-Graduate Degree Courses. Upon successful completion the student will benefit from a tax credit enabling them to recover part of the costs incurred.



Discover more on website

<https://maltaenterprise.com/support/get-qualified-2017-2023>

Course Fees

 Tuition Fees Year 1	 Registration Fees Year 1	 Tuition Fees Year 2 and 3	 Registration Fees Year 2 and 3
€6,500	€350	€3,500 €4,500	N/A

Fees include

1. Assessment fee
2. Overall qualification certificate
3. Course material tutorial support notes
4. Access to online course resources

Intakes: To obtain information about the current intakes dates, we invite you to get in touch with our office.

