

# B.Sc. in Computing

MQF Level 6 | 180 ECTS







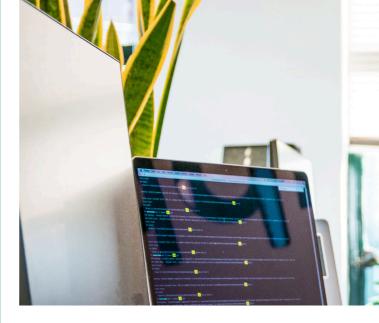
# **ABOUT US**

Founded in 2005 as IDEA Leadership and Management Institute, IDEA Academy has since evolved into one of Malta's leading higher education institutions accredited by the Malta Further and Higher Education Authority. We offer a selection of bespoke, accredited programmes in a wide variety of fields, from certificate level right up to master's level.

Our mission is to provide quality, industrydriven education to adult students who are already seasoned practitioners and professionals. In doing so, we adopt a student-centric, blended approach to learning with minimal disruption to one's personal and professional life.



ALSO AVAILABLE ONLINE



# B.Sc. in Computing

MQF Level 6 | 180 ECTS

### COURSE DESCRIPTION

The Bachelor of Science in Computing is a practical qualification that will prepare you for a successful career in IT and computing.

The programme will cover areas such as mathematics, programming, data analytics, software development, data structures, computer systems, website design and development, and database design and implementation, amongst many other topics.

In your second year of study, you will have the opportunity to tailor the programme to reflect your particular interests or career aspirations by specialising in one of three areas: digital marketing, blockchain or intelligent systems.



### TARGET AUDIENCE

This course is targeted at:

- individuals seeking academic and professional advancement in computing;
- mid-career break professionals looking for opportunities to return or change their career.

#### **ENTRY REQUIREMENTS**

Candidates who apply for this course must be in possession of the following:

 a qualification at MQF Level 4 in subjects related to Mathematics, Science or Computing (minimum two 'A' Levels or equivalent);

# **AND**

 a pass in English at MQF Level 3 ('O' Level or equivalent).

Preference is given to students having a Level 4 diploma in engineering or computing and an A-level standard in mathematics.

# CAREER PATHS

The possible positions for which this programme aims to prepare you for include, but are not limited to:

- database administrator
- IT technical support officer
- applications programmer
- systems programmer
- systems analyst
- programmer

# STRUCTURE & ASSESSMENT

This is a part-time programme and will typically take 39 months to complete. The method of assessment is assignment-based.

### The course comprises:

- 6 lectures per module (twice a week);
- 3-hour lectures (evening);
- 12 hours of online content per module, comprising asynchronous online discussions, tutorials and/or videos.



# **COURSE PROGRESSION MAP**

The following progression map depicts your journey towards achieving the B.Sc. in Computing. The map illustrates the interim exit points that lead up to the full bachelor's degree (180 ECTS).

### Complete 5 compulsory modules \_

MQF 5
30 ECTS

Certificate in Computing **Duration: 6 months** 

### Complete 10 compulsory modules

MQF 5 **60 ECTS**  Diploma in Computing **Duration: 12 months** 

Complete 15 compulsory modules + 1 area of specialisation

MQF 5 **120 ECTS**  Higher Diploma in Computing **Duration: 24 months** 

Complete all compulsory modules + 1 area of specialisation + dissertation

MQF 6

B.Sc. in Computing **Duration: 39 months** 

# COST

Reading for the entire Bachelor of Science (B.Sc.) in Computing as presented in this brochure costs €9,000.\*

The cost for the different exit points is as follows:

- Certificate in Computing: €2,000
- Diploma in Computing: €4,000
- Higher Diploma in Computing: €6,000

Upon successful completion of this course, students will be eligible for a 70% refund of the cost through the 'Get Qualified' scheme.\*\*

Due to the modular structure of the course, you may also opt to take individual modules as standalone. The entry requirements still apply.\*\*\*

- \* Prices are applicable to students who reside in Malta at the time of applying.
- \*\* Terms and Conditions apply.
- \*\*\* For the price of individual modules, please contact the IDEA Academy team.

# PROGRAMME OUTLINE

MODULE/UNIT TITLE	COMPULSORY OR ELECTIVE	ECTS
1. Academic Writing	Compulsory	6 ECTS
2. Mathematics 1	Compulsory	6 ECTS
3. Programming	Compulsory	6 ECTS
4. Website Design and Development	Compulsory	6 ECTS
5. Computer Systems Architectures	Compulsory	6 ECTS
6. Data Analytics	Compulsory	6 ECTS
7. Operating Systems	Compulsory	6 ECTS
8. Client/Server Computing Systems	Compulsory	6 ECTS
9. Computer Networks	Compulsory	6 ECTS
10. Software Development Lifecycles	Compulsory	6 ECTS
11. Mathematics 2	Compulsory	6 ECTS
12. Discrete Mathematics	Compulsory	6 ECTS
13. Artificial Intelligence	Compulsory	6 ECTS
14. Data Structures and Algorithms	Compulsory	6 ECTS
15. Database Design and Implementation	Compulsory	6 ECTS
16. Principles of Marketing	Digital Marketing  Major - Specialisation	6 ECTS
17. Digital Marketing		6 ECTS
18. Marketing Analytics and Data Science		6 ECTS
19. Social Media Practice		6 ECTS
20. Optimising your Digital Presence		6 ECTS
21. Introduction to Blockchain Technology	Blockchain Major - Specialisation	6 ECTS
22. Essentials of Disruptive Technology and Innovation		6 ECTS
23. Introduction to Cryptocurrency		6 ECTS
24. Regulation and Cryptocurrency in the Modern World		6 ECTS
25. Cryptographic Security		6 ECTS
26. Business Intelligence	Intelligent Systems - Specialisation	6 ECTS
27. Knowledge Representation and Automated Reasoning		12 ECTS
28. Natural Language Processing		6 ECTS
29. Machine Learning		6 ECTS
30. Research Methods in Computer Science	Compulsory	6 ECTS
31. Security	Compulsory	6 ECTS
32. Advanced Programming	Compulsory	6 ECTS
33. The Internet of Things (IoT)	Compulsory	6 ECTS
34. Advanced Algorithms	Compulsory	6 ECTS
35. Database Management Systems	Compulsory	6 ECTS
36. Data Mining	Compulsory	6 ECTS
37. Dissertation	Compulsory	18 ECTS

You are required to complete all compulsory modules (132 ECTS), and only 1 selected area of specialisation (30 ECTS), as well as the dissertation (18 ECTS) to fulfil the requirements of this bachelor's degree.

**Total credits: 180** 

