HIGHER TECHNICAL PROFESSIONAL COURSES

TECHNOLOGIES AND INFORMATION SYSTEMS PROGRAMMING

INSTITUTO POLITÉCNICO DA MAIA **IPMAIA**

2017/2018 ACADEMIC YEAR

TECHNOLOGIES AND INFORMATION SYSTEMS PROGRAMMING

COORDINATOR

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CONTACT DETAILS

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This Higher Technical Professional Course is a vocational training course taught as part of polytechnic higher education and lasts 4 semesters, corresponding to 120 ECTS.

The course is organised into general and scientific training, technical training and on-the-job training (internship), and each student is awarded with a **Higher Technical Professional Diploma at level 5 of the European Qualifications Framework for Lifelong Learning.**

1.   **Professional profile**

The Higher Technical Professional Course in Technologies and Programming of Information Systems aims to train professionals who are able to **analyse, design, develop and implement information systems**, with a view to optimising organisations' management and operations.

2.   **Professional opportunities**

Programmer and manager of information systems; database administrator; systems administrator; IT technician; IT assistant; web developer; mobile device programmer; IT systems operator.

3.   **Entry requirements (one of the following)**

3.1   Having completed a **secondary education course** qualification or a legally equivalent qualification.

3.2   Having passed the special exams for assessing capacity to attend higher education for **people over 23** (Decree-Law no. 64/2006 of 21 March).

3.3   Holding a technological specialisation diploma, a higher technical professional diploma or a higher education qualification.

4.   COURSE STRUCTURE

YEAR 1 • 60 ECTS

	Course units	Sem.	Contact hours	ECTS
General and scientific training	Communicating in the Portuguese Language	1	50	5
	Human Behaviour in Organisations	1	50	5
	Economic and Social Culture	1	50	5
	Technical English	2	50	5
	Art, Culture and Communication in the Digital Age	2	50	5
Technical training	Introduction to Programming	1	50	5
	Mathematics and Statistics	1	50	5
	Systems and Database Analysis	1	50	5
	Operating Systems	2	40	4
	Object-Oriented Programming	2	60	6
	Web Programming (Back End)	2	50	5
	Algorithms and Data Structures	2	50	5
			600	60

YEAR 2 • 60 ECTS

	Course units	Sem.	Contact hours	ECTS
Technical training	Web Programming (Front End)	1	50	5
	Mobile and Cloud Computing	1	60	6
	Information Systems	1	40	4
	Security in IT Systems	1	40	4
	Integrating Systems and Applications	1	50	5
	Information Systems and Technologies Project	1	60	6
On-the-job Training	On-the-job Training – Internship (750 hours)	2		30
			300	60
		Total	900	120

FOR FURTHER INFORMATION
ipmaia.pt • fb.com/ipmaia.pt

Exclusive conditions

- Extensive parking on campus.
- A comfortable, welcoming environment throughout the campus.
- Easy access by public transport, particularly the metro at ISMAI station.
- An environment with new technologies and sport, improved with the construction of a new, state-of-the-art sports complex.

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4475-690 Maia

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Metro/Line C - ISMAI

5.   Continuing studies – Bachelor's degrees

5.1   The application by holders of Higher Technical Professional Diplomas to attend IPMAIA Bachelor's degrees is subject to the conditions established by the institution body that is competent to do so in accordance with the law and the statutes. Depending on the Higher Technical Professional Course and Bachelor's degree, these conditions may establish the need to pass a specific IPMAIA admission exam, or allow the exemption to perform such an exam.

5.2   Credits acquired on the Higher Technical Professional Course may be transferred to a Bachelor's degree programme when continuing studies.

Observations

a)   Students who intend to apply for an IPMAIA Bachelor's degree course and must sit the specific admission exam will receive suitable preparation during the teaching of the Higher Technical Professional Course.

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