



### **BACHELOR IN "INFORMATION TECHNOLOGY"**

### STUDY PROGRAMME OBJECTIVES

The aim of this program is to prepare skilled specialists, capable of fulfilling information technology demands regarding processing, warehousing and information communication between computers, mobile and other electronic devices. This program prepares students with the right knowledge to use information technology, as a field that demands secure management and access of high flow of information, through several systems. The diploma holder has good knowledge in programming in several coding languages, databases, web pages design, mobile applications and other information technology applications used in businesses, computer network, software engineering etc.

### LEARNING OUTCOMES

At the end of the study program, the student will be able to:

- Build and maintain computer networks.
- Organize computer infrastructure efficiently.
- Develop and maintain databases.
- Develop software using different programming languages.
- Identify the best software and hardware solutions.

### SPECIALISATION: SOFTWARE DESIGN

- Design, manage and maintain software that is needed for information systems.
- Develop and maintain databases.
- Manage security in information systems.

#### SPECIALISATION: GRAPHIC-DESIGN

- Design of graphical user interfaces.
- Use knowledge in visual composition, applied design programs, web applications design.

#### JOB OPPORTUNITIES

Students who complete their studies in this study program have opportunities to be employed in all sectors where computer technology is used, including information processing and operational processes, software development companies, hardware, and software product development companies, etc. The diploma holder of this program has employment opportunities in the following positions:

- Specialist in IT Systems.
- Specialist in computer networks.
- Database specialist.
- Software developer (frontend, backend, mobile, desktop, etc.).
- Software designer.
- Specialist in IT project management.

Graduates may be employed in business and financial sector, public institutions, nonprofit organizations, health, educational etc.





# **BACHELOR in "INFORMATION TECHNOLOGY" - 180 ECTS**

No.	Year	Term	Subject Title	ECTS
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## **A - GENERAL COURSES**

1	I	1	Algebra and Geometry	6
2	I	1	Mathematics Analysis 1	6
3	I	2	Physics 2	6
4	I	2	Accademic writing and research methods	8
5	I	1	Basics of Informatics	4
6	I	2	Introducition to probability	6
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# **B - CORE COURSES**

1	I	1	Algorithmics and introduction to programming	6
2	Ι	1	Computer Architecture and Organisation	6
3	Ι	2	Programming 1	6
4	II	1	Programming 2	6
5	II	1	Computer Networks	6
6	II	2	Data Structure	6
7	II	2	Theory of Databases	6
8	II	2	Operating Systems	6
9	II	2	Information Systems for Business Management	6
10	III	1	Data Communication	6
11	III	1	Virtualisation and cloud computing	5
12	II	1	Introduction to Big Data and Business Intelligence	8
13	III	1	Security of Information Systems	6
14	III	2	Introduction to software engineering	6
15	III	2	Computer Systems Administration	6

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# C - INTERDISCIPLINARY/INTEGRATIVE COURSES

Specialization I		tion I	Software Design	
1	III	1	E-services	6
2	I	2	Web development	6
3	III	2	Machine learning	6
4	III	1	Mobile application development	6
5	III	1	Honors Course	6
Specialization II		tion II	Graphic Design	
1	I	1	Visual Composition	6
2	I	2	Design Programs	6
3	III	1	Web Design and Applications	6

4	III	2	Personal Style Development	6	
5	III	1	Honors Course	6	
				24	

## **D - ADDITIONAL COURSES**

1	II	1	English	5
2	III	1	Fundamentals of Multimedia	6
3	I	2	Projects design and management	6
4	III	2	Internship	5

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## **E - FINAL OBLIGATIONS**

1	III	2	Diploma Thesis/Final Exam	7
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