



MASTER OF SCIENCE IN “INFORMATION ENGINEERING”

LEARNING OUTCOMES

By the end of the study programme the students will be able to:

- Identify, design, and develop complex software solutions.
- Design, develop, secure, and maintain complex computer networks.
- Develop ERP-s through advanced coding knowledge.
- Use artificial intelligence as machine learning.
- Develop a research study that applies quantitative or qualitative research methods to collect, organize, and analyse data to address an applied scientific research question.

PROFILE: SOFTWARE ENGINEERING

- Design and develop software solutions.
- Define patterns and manage large amounts of data.

PROFILE: INFORMATION SYSTEMS SECURITY

- Ensure information system and computer network security.
- Manage threads in IT.

PROFILE: DATA MANAGEMENT

- Design and manage complex data warehouses.
- Define patterns and manage large amounts of data.

PROFILE: APPLICATION DESIGN AND DEVELOPMENT

- Apply new Information technologies for creating adapt applications in several fields.
- Identify and manage threads in information systems.

CURRICULA

MASTER OF SCIENCE IN "INFORMATION ENGINEERING" 120 ECTS				
No.	Year	Term	Subject Title	ECTS
A - GENERAL SUBJECTS/ 10% / 12 ECTS				
1	I	1	Advanced Research Methods	6
2	II	1	Operations Research	6
				12
B - CHARACTERIZING/CORE SUBJECTS/ 50-60%/60 ECTS				
1	I	1	System Architecture and Engineering	6
2	I	2	Computer Networks Management	6
3	I	2	IT Systems Design and Development	6
4	I	1	Management of Information Systems	6
5	I	1	Database Design and Implementation	6



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No.	Year	Term	Subject Title	ECTS
6	I	2	Software Engineering	6
8	I	2	Strategic Management	6
9	I	1	Information Systems Applications	6
7	II	1	Web Development: Applications and Programming	6
10	II	1	Artificial Intelligence	6
				60
C - INTERDISCIPLINARY/INTEGRATING/ELECTIVE SUBJECTS 12-20% / 18 ECTS				
PROFILE:		SOFTWARE ENGINEERING		
1	I	2	Distributed Systems	6
2	II	2	Big Data Management	6
3	II	1	Risk Management in IT	6
PROFILE:		INFORMATION SYSTEM SECURITY		
1	I	2	Computer Networks Security	6
2	II	1	Risk Management in IT	6
3	II	2	Cryptography and Ethical Hacking	6
PROFILE:		DATA MANAGEMENT		
1	I	2	SQL Server and Reporting Platforms	6
2	II	1	Advanced Database Administration	6
3	II	2	Big Data Management	6
PROFILE:		APPLICATIONS DESIGN AND DEVELOPMENT		
1	I	2	SQL Server and Reporting Platforms	6
2	II	2	Advanced Software Development	6
3	II	1	Risk Management in IT	6
				18
D -ADDITIONAL SUBJECTS/ 10% / 12 ECTS				
1	II	2	Internship	12
E - FINAL OBLIGATIONS / 10-15%/18 ECTS				
1	II	1-2	Diploma Thesis	18
				120