SOFTWARE ENGINEERING
Profile of Educational Programme

Degree	Specialty	Educational Programme	Duration of studies
Bachelor	Software Engineering	Software Engineering	3 years 10 months (8 semesters)
Master	Software Engineering	Software Engineering	1 year 4 months (3 semesters)
		Mathematical Tools and Software of Computer Systems	
		Software Engineering	1 year 9 months (4 semesters)
		Mathematical Tools and Software of Computer Systems	
PhD	Software Engineering	Software Engineering	4 years

WHAT STUDENTS STUDY

- Algorithms and Data Structures
- Analysis of Software Requirements
- Software Architecture and Design
- Software and Data Security
- Empirical Methods in Software Engineering
- Programming Tools for Knowledge Bases and Databases
- Software Construction
- Human-Machine Interaction
- Software Project Management
- Microprogramming
- Object-Oriented Design

- Introduction to Software Engineering
- Programming Fundamentals
- Programming of Parallel and Distributed Calculations
- Internet Programming
- Professional Practice in Software Engineering
- Databases and Knowledge Bases Design
- System Analysis and Design
- Information Systems
- NET Technology
- Software Quality and Testing

ADVANTAGES OF CHOOSING THIS PROGRAMME

Graduates in Software Engineering are trained to perform the following professional tasks:

Collection and analysis of user needs and requirements, definition of functional requirements of designed system: to apply methods of system analysis; to identify the sources of requirements and to support the process of them receiving; to develop the user requirements specifications.

Requirements management: to provide requirements analysis, to develop the specification of software requirements, to perform their verification and certification; to model the different aspects of the system for which application created.

Design and construction the software tools: to design the components of architectural solution; to design the human-machine interface; to design and to implement the databases.

Participation in the professional communication processes: to negotiate with partners about the basic agreement; to make the ethical decisions when confronted with ethical dilemmas.

Verification and certification the software tools: to identify and to measure the quality attributes; to implement the integrated and modular software testing.