

# COMPUTER SCIENCE AND INFORMATICS

For more than thirty years Faculty of Electronic Engineering educates students in the field of Computer Science and Informatics. Remarkable experience, excellent personnel potentials, well equipping, as well as the fact that most of the successful informatics personnel in the region come from our Faculty, show that the studying program Computer science and Informatics, at the Department of Computer science and Informatics, makes a good choice for young people craving for knowledge and good career. During the last decade, when the candidates sign up for the entrance examination, they show the greatest interest for this very study program.

The study program-Computer Science and Informatics involves the fields of software and hardware systems for different applications design, information processing and organizing, managing different types of information, development and application of different information technologies, intelligent systems design, seeking and obtaining information for different purposes, interaction of man and computer development, as well as development and the use of computer communications. The following courses are foreseen within this studying program:

- Computer Engineering (CE)
- Information Technologies (IT)
- Software Engineering (SE)

While making the curriculum and syllabi for the study program, Department for Computer science and Informatics, at the Faculty of Electronic Engineering, took into consideration the needs of computer and informatics industry in the country and the region, and available teaching staff potential of the Department and



the Faculty, as well as recommendations given in the document "Computing Curricula 2004, A Guide to Undergraduate Degree Programs in Computing" are the fruit of the work of the three world most professional associations (Association for Computing — AIS and IEEE Computer Society — IEEE-SC). ACM, AIS and IEEE-CS recommend the existence of such curricula and under these names they exist at the most important world universities. Faculty of Electronic Engineering, Nis, was a Coordinating institution of a great European project for curriculum and syllabi innovation in the field of Computer Sciences, financed by the European Commission (*Innovation of Computer Science Curriculum in Higher Education* — <http://tempus.elfak.ni.ac.yu>), and experiences and knowledge acquired by the work at this project are built into this new study program. Intensive international collaboration of professors and associates of the Computer Science Department made the realization of the student mobility program possible. This means that a great number of students, during the studies, at this study program will have a chance to work and study at some well-known European institutions for higher education. The main characteristic of these studies is a practical knowledge gaining by working at real projects together with the professors and associates, as well as student involvement into science and research work. A special privilege is that within the regular teaching, students will have a chance to prepare themselves for gaining different types of certificates of a world-known software and hardware companies, which will increase the value at the job market.

Students who graduate at the study program Computer Science and Informatics easily find their jobs in the most eminent Serbian and world companies, because a great number of jobs where the knowledge of software and hardware design of computer systems and information technologies application, is needed. A great number of students obtain prestige international scholarships.



## Computer Engineering

The major Computer engineering offers knowledge from the field of computer hardware and software, computer network design and setting, field of integration of software and hardware, design and programming parallel, distributed systems and the systems for special purposes, mobile systems and services, but also the embedded system design. This major is dedicated to students who want their career to be focused on the development of systems based on computers.



## Information Technologies



Students of the major Information technologies are expected to acquire knowledge oriented towards development and application of wide range information technologies, which encompasses wide area from the knowledge of computer systems and data processing, to multimedia technologies, and also to organization of trading and information systems. Special attention is paid to web technologies application.

## Software Engineering

Students of the major Software engineering should acquire knowledge by which they would be able to design systematic and applicative high quality software by using up-to-date techniques and software design. During their studies they will learn the following: to develop software systematically, efficiently use computer systems infrastructure, as well as to apply contemporary technologies during the software products development. The students will be prepared for team work at software products development, and also be ready to run the projects from the field of software engineering.

