Politehnica University of Timisoara
Faculty of EngineeringHunedoara

Bachelor study program: Industrial Informatics
Study Domain: Applied Engineering Sciences

The mission of the Industrial Informatics study program consists in developing specialists with superior technical preparation in informatics, in Applied Engineering Sciences study domain, which are capable to deploy their activity in any engineering domain using IT technologies (computer aided design, software design and implementation, industrial automation), but also in other fields where interdisciplinary acknowledgements are necessary in electrical engineering and computer science domain as well. A very important issue is for the graduated students to comprehend concepts, principles and theories of computer sciences, to be capable to implement software projects for civil and industrial systems and also to use with efficiency the IT techniques.

The purposes of the bachelor study program Industrial Informatics are the followings:
- Assimilation of knowledgements and abilities in using software specialized in industrial domain.
- Assuring of a knowledge level which must permit to the graduated students to identify some technical solutions that implies using IT techniques in industrial fields.
- Preparing the students in order to be able to design and implement systems with logic programmable controllers, numeric controlling, intelligent robots and also to implement command and control systems based on microcontrollers and signal processors.
- Integration of the IT techniques, automatics and electronics in designing and using the industrial systems.

The bachelor study program Industrial Informatics is functioning in the Faculty of Engineering Hunedoara from 2003-2004. The structure of the study program Industrial Informatics is correlated with the national standards from the superior education system according to RNCIS and offers competences and abilities asked by the employers as the followings: using fundamental computer science and IT concepts, modelling, using modern measurement systems based on acquisition systems and signal processing, simulation and automat process control, designing and implementation of PLC systems, numerical systems, intelligent robots, knowing the advanced automation (fuzzy logic, neural networks), programming and developing the automation and control systems based on microcontrollers and signal processors.

The bachelor study program Industrial Informatics will be the selection base of the candidates for the master study programs, in our faculty two of this study programs are functioning in electrical engineering domain.