

Translated content of the older video available from the YouTube

<https://www.youtube.com/watch?v=rAMC1nmn7e8>

(Peter Nagy, 2010 / translated by Ales Janota, DCIS)

Text (opening credits):

University of Zilina, the field of study Multimedia technologies, introduces the documentary Automation.

Speech:

Control in various branches of industry, transport, requires up-to-date control systems. So the people who want to design such systems, program them, operate, work with them, sell them, install, must obviously be well-educated, very often at the university level. One of the offered alternatives is study of the study programme in Process Control at the Department of Control and Information Systems at the Faculty of Electrical Engineering, University of Zilina. Those who are interested in the Automation field of study may choose one of three study cycles (bachelor, master, doctoral) and study both theoretical and practical courses that prepare them for their work in the branch of control engineering. A significant part of the study programme is devoted to programming. Students learn principles of programming in C, C++, single-chip controllers, programmable logical controllers (so called PLCs) – computers used to control technological processes in industry. An important part of the study is focused on informatization and informatics, so the students in addition to work with PCs and programming are also trained in the field of information systems. A certain interesting topic interlarding the study content is teaching the courses with safety seen from other viewpoints, not from the point of safety-related control systems view but from the viewpoint of security, i.e. systems for protection of humans, properties, security systems. Thus within the set of provided courses our students are given knowledge on principles of construction of various sensors used not only in industry but also in security systems. They will learn about operation principles of e.g. movement detectors or smoke detectors. Within the course in Security systems they will be toughed to apply those detectors in alarm systems, fire alarm systems, CCTV systems used for object protection or access systems. The study programme in Process Control offers students their professional orientation to control of industrial processes (then the attention is given to automation disciplines). The other alternative available in the field of study of Automation is orientation to transport processes. In that case students will be given principles and construction of control systems used in transport operation, mostly the railway one. They will learn how railway interlocking and signalling systems work but will also acquaint themselves with systems of road traffic control and management. The unique aspect of the study provided by the Department is the aspect of safety – functional safety and technical safety.

Another part of study deals with application of higher programming languages, so in the master level students can learn e.g. programming in C++, Java etc. The master degree study is completed in the 2nd year of the study by elaboration of master projects and then our graduates are able to work with various companies in the field of industry or transport sector involved in manufacture, design, construction or projection of control systems. Graduates from this study programme can be found in all major companies operating control systems, majority of our graduates have found posts in companies providing control systems to the transport sector. They work as programmers; designers of so called address software for modern railway interlocking systems, they work as designers of railway signalling systems, design engineers of road control systems, designers of control systems used to automate intelligent transport systems. So our graduates can be found e.g. in companies operating electronic toll collection systems. It means that their profile and employability is very wide, in multiple technological branches. So if you are interested in dealing with such interesting technologies and techniques, make choice of the given study programme at the Faculty of Electrical Engineering – Process Control at the master degree level or Automation at the bachelor degree level. If you need more information, please, visit the page <http://kris.uniza.sk>. I am looking forward to meeting you.

Text (end titles):

Cast: Ing. Peter Nagy

Script: Lukas Mlynarik

*Camera: Jaroslav Pupava
Slavomir Siska*

Editor: Lukas Mlynarik

*Sound: Jaroslav Pupava
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*Special thanks to:
Department of Control and Information Systems
Ing. Peter Nagy*

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