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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Electronic Engineering |
| **GENERAL INFORMATION** |
| Study program  | Control Systems |
| Study Module (if applicable) | Automatic Control, Computer Control Systems and Measurement Techniques |
| Course title | Computer Control Systems |
| Level of study | ☐Bachelor ⊠ Master’s ☐ Doctoral |
| Type of course | ⊠ Obligatory ☐ Elective |
| Semester  |  ⊠ Autumn ☐Spring |
| Year of study  | first |
| Number of ECTS allocated | 4 |
| Name of lecturer/lecturers | Jovanović D. Zoran, Milojković T. Marko |
| Teaching mode |  ⊠ Lectures ☐Group tutorials ☐ Individual tutorials ⊠ Laboratory work ☐ Project work ☐ Seminar ☐Distance learning ☐ Blended learning ⊠ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Acquiring knowledge of computer control systems applied in both centralized and distributed systems. Practical knowledge of computer application in the process industry and in the control of decentralized and distributed structures (electrical distribution, municipal and energy system). |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Control of complex technological processes. Centralized control. Distributed control and hierarchical control. Choosing a computer for real-time control. Input-output devices. Software support for control systems in real time. Interconnecting computer with technology processes. Application of microcomputers in the design and implementation of control systems. Practical application of PLC and SCADA systems in process control. Computer applications in process industries, machine tools and municipal systems control. |
| **LANGUAGE OF INSTRUCTION** |
| ⊠ Serbian (complete course) ☐ English (complete course) ☐ Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)☐Serbian with English mentoring ☐Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **10** | **Written examination** | **20** |
| **Projects** | **30** | **Oral examination** | **20** |
| **Teaching colloquia** | **20** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |