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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of technology |
| **GENERAL INFORMATION** |
| Study program  | **Food technology and biotechnology, Chemical technologies, Textile technologies** |
| Study Module (if applicable) |  |
| Course title | Automatic process control |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [x]  Obligatory [ ]  Elective |
| Semester  |  [ ]  Autumn [x] Spring |
| Year of study  | III |
| Number of ECTS allocated | 7 |
| Name of lecturer/lecturers | Sreten Stojanovic |
| Teaching mode |  [x] Lectures [x] Group tutorials [ ]  Individual tutorials [x] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Getting to know students with basics of automatic control systems in stationary and transient operating mode. Application of Matlab software to solve practical engineering problems related to process control.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Analysis of the continuous system in the time domain. Analysis of the continuous system in the complex domain. Application of the Laplace transform.** **Transfer function. Analysis of the continuous system in the frequency domain. Frequency response. Frequency characteristics. Analysis of the system in a steady state. Steady state errors. The state space of systems. System stability. Process control.**  |
| **LANGUAGE OF INSTRUCTION** |
| [x] 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** | **5** | **Written examination** |  |
| **Practical teaching** | **15** | **Oral examination** | **30** |
| **Teaching colloquia** | **50** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |