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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 |
| Course title | Flexible Production Systems |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [ ]  Autumn [ ] Spring |
| Year of study  | 1 |
| Number of ECTS allocated | 4 |
| Name of lecturer/lecturers | Đorđević S. Goran |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [x]  Project work [x]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Introduction to the production systems and their comparison. Cellular manufacturing systems and their applications. The application of Computer Integrated Manufacturing - CIM, advantages and disadvantages. Understanding of manufacturing technologies, their advantages and disadvantages. Ability to track trends in modern production systems. Development of own production techniques and quality control in flexible manufacturing systems. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Introduction to industrial production. What are production lines, methods of production, continuous production, flexible manufacturing systems. Types of flexibility and flexible manufacturing systems. Management of flexible manufacturing systems. Detailed example of a flexible manufacturing system. Production process and reduction of waste. Review on the quality system. Quality assurance and control, tolerance. Standard components, what are they and why use them in the development and manufacture. Complexes of standard components. Development of existing products. Packing, function of packing, packaging materials. |
| **LANGUAGE OF INSTRUCTION** |
| [x] Serbian (complete course) [x]  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** | **0** |
| **Practical teaching** | **50** | **Oral examination** | **40** |
| **Teaching colloquia** | **0** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |