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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | **Electronic Engineering** |
| **GENERAL INFORMATION** |
| Study program  | Electronics and Microsystems |
| Study Module (if applicable) | Electronic Devices and Microsystems |
| Course title | Integrated Microsystems |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  | [ ]  Autumn [x] Spring |
| Year of study  | I |
| Number of ECTS allocated | 5 |
| Name of lecturer/lecturers | Prijić P. Aneta |
| Teaching mode |  [x] Lectures [ ] Group tutorials [x]  Individual tutorials [x] Laboratory work [x]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| The knowledge of the structure, operation principles and configurability options of integrated microsystems based on the Programmable System-on-Chip (PSoC). Ability to realize versatile applications with the PSoC. The study of the structure and functioning of integrated microsystems based on the Programmable System-on-Chip (PSoC). Introduction to the configurability concept and implementation possibilities of a PSoC. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Introduction and features of the Programmable System-on-Chip architecture (PSoC3, PSoC4 and PSoC5). Central subsystem. Analog subsystem. Digital subsystem. System wide resources and interface subsystem. Special purposes modules (SC/CT, LCD and CapSense drivers). PSoC prebuilt components. Software development environment. Best practices in PSoC application development. PSoC development kits.  |
| **LANGUAGE OF INSTRUCTION** |
| [x] Serbian (complete course) [ ]  English (complete course) [ ]  Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)[x] Serbian with English mentoring [ ] Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **20** | **Written examination** | **20** |
| **Practical teaching** | **40** | **Oral examination** | **20** |
| **Teaching colloquia** |  | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |