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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | **Faculty of Electronic Engineering** |
| **GENERAL INFORMATION** |
| Study program  | **Telecommunications** |
| Study Module (if applicable) | Telecommunications and Signal Processing |
| Course title | Principles of Software Radio |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [ ]  Autumn [x] Spring |
| Year of study  | 1 |
| Number of ECTS allocated | 4 |
| Name of lecturer/lecturers | Nikolić B. Zorica, Milošević D. Nenad |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [x] Laboratory work [x]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Introduction to software radio and devices that can be programmed to operate with different standards. Description of the software radio elements and the analysis of the receiver operation. Theoretical knowledge. Knowledge of the elements and principles of software radio operation. Laboratory work on some hardware platforms for software radio.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Introduction. Basic principles. Elements of transceivers based on software radio. Adaptive and reconfigurable filters. Transversal filter. Algorithms for adaptation. Hardware platform for software radio. Principles and basic features.** |
| **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** | **20** |
| **Practical teaching** | **10** | **Oral examination** | **20** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |