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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Electronic Engineering | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Electrical Engineering and Computing | | |
| Study Module (if applicable) | | | | Telecommunications | | |
| Course title | | | | Digital Telecommunications | | |
| Level of study | | | | ☐Bachelor ☐ Master’s x☐ Doctoral | | |
| Type of course | | | | ☐ Obligatory x☐ Elective | | |
| Semester | | | | x☐ Autumn ☐Spring | | |
| Year of study | | | | 1. | | |
| Number of ECTS allocated | | | | 10 | | |
| Name of lecturer/lecturers | | | | Perić H. Zoran | | |
| Teaching mode | | | | x☐Lectures ☐Group tutorials ☐ Individual tutorials  ☐Laboratory work x☐ Project work ☐ Seminar  ☐Distance learning ☐ Blended learning ☐ Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| The goal is to gain the theoretical knowledge and to become familiar with the latest developments and research in the field of digital telecommunications. Improved theoretical knowledge in the field of digital telecommunications. The ability to solve problems in the studied area. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Adaptive scalar quantization. Adaptive pulse code modulation. Adaptive differential pulse code modulation. Adaptive delta modulation. Delayed decision coding. Subband coding. Channel capacity and coding. Channel coding. Scalar and vector quantization. Transform coding. Audio and speech compression. Video compression. | | | | | | |
| **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** |  | | **Written examination** | | |  |
| **Practical teaching** | **50** | | **Oral examination** | | | **50** |
| **Teaching colloquia** |  | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |