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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Electronic Engineering | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | Electrical Engineering and Computing | | |
| Study Module (if applicable) | | | | Computing and Informatics | | |
| Course title | | | | Future Internet | | |
| Level of study | | | | Bachelor  Master’s  Doctoral | | |
| Type of course | | | | Obligatory  Elective | | |
| Semester | | | | Autumn Spring | | |
| Year of study | | | | I | | |
| Number of ECTS allocated | | | | 10 | | |
| Name of lecturer/lecturers | | | | Tošić B.Milorad, Petković M. Ivan | | |
| Teaching mode | | | | Lectures Group tutorials  Individual tutorials  Laboratory work  Project work  Seminar  Distance learning  Blended learning  Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| Introducing students to the European research agenda on new Internet as well as with research in  other parts of the world on this subject. Gaining experience in research outputs topics and issues that  are relevant to the currently active projects. Practical experience with the experiments on the global  development platforms for new Internet.  Students are able to engage in research in any of the major European projects in the field of the new  Internet. They will become familiar with the fundamental theories so that in practice can detect and  solve problems, mastered the practical skills of experimentation and development solutions. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Common conceptual foundations of the new Internet: an overview of system architecture, the principle  of network neutrality, socio-economic aspects, the network, security, resource management, quality of  service, information facilities, the business aspect. Cognitive systems. Services as a basic building  block of the new Internet: System Architecture, p-2-p services, management services. Virtualization.  Overlay network. Ontologies as a building block of the new Internet: Conclusion and management  system, analytics and performance measurement, recording and management of resources. New  Internet Basics: architectures, mobile Internet, cloud computing, identity and trust, searching and  finding, experiments. Technological aspects: Internet of Things, networks, content services.  Applications: smart cities, smart energy management, smart health, smart business systems, and so  on. Infrastructure development and experimental approaches. Prototype implementation. | | | | | | |
| **LANGUAGE OF INSTRUCTION** | | | | | | |
| 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** |  | | **Written examination** | | |  |
| **Practical teaching** | **50** | | **Oral examination** | | | **50** |
| **Teaching colloquia** |  | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |