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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 [x]  Doctoral |
| Type of course | [ ]  Obligatory [x]  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 |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [x]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Introducing students to the European research agenda on new Internet as well as with research inother parts of the world on this subject. Gaining experience in research outputs topics and issues thatare relevant to the currently active projects. Practical experience with the experiments on the globaldevelopment platforms for new Internet.Students are able to engage in research in any of the major European projects in the field of the newInternet. They will become familiar with the fundamental theories so that in practice can detect andsolve 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 principleof network neutrality, socio-economic aspects, the network, security, resource management, quality ofservice, information facilities, the business aspect. Cognitive systems. Services as a basic buildingblock 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 managementsystem, analytics and performance measurement, recording and management of resources. NewInternet Basics: architectures, mobile Internet, cloud computing, identity and trust, searching andfinding, experiments. Technological aspects: Internet of Things, networks, content services.Applications: smart cities, smart energy management, smart health, smart business systems, and soon. Infrastructure development and experimental approaches. Prototype implementation. |
| **LANGUAGE OF INSTRUCTION** |
| [x] 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** |