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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | **Faculty of Civil Engineering and Architecture** |
| **GENERAL INFORMATION** |
| Study program  | Architecture |
| Study Module (if applicable) |  |
| Course title | SMART BUILDINGS |
| Level of study | Integrated studies  |
| Type of course | Elective |
| Semester  | Spring |
| Year of study  | 3rd  |
| Number of ECTS allocated | 3  |
| Name of lecturer/lecturers | Milan D.Tanic |
| Teaching mode | Lectures Group tutorials Individual tutorials Seminar Blended learning  |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Introducing the emergence and development of smart buildings in modern architecture. Learning about the performances and the mode of their functioning. Introduction to the technological achievements in this field and the specifics of the resulting architectural expression. Learning about the functioning principles of smart buildings. Gaining knowledge about the ecological values, cost-effectiveness and technological capabilities of this type of object. Insights on designing concepts and aesthetics of the architecture of smart buildings. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| 1. Defining the concept, the emergence and development of smart buildings
2. Integrated design
3. Ecological values and cost-effectiveness
4. Engineering, technology, the future of architecture
5. Electronics and Automatics (guest lecture)
6. Specifics of the façade construction (guest lecture)
7. Materials and Innovations (guest lecture)
8. Typology and specificities
9. The aesthetics of the architecture of smart buildings
10. Representative examples from around the world
11. The domestic experience

Debate workshops, consultations, structuring of the seminar paper and determining the mode of its development. |
| **LANGUAGE OF INSTRUCTION** |
| Serbian (complete course)  |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **15** | **Written examination** | **-** |
| **Practical teaching** | **15** | **Oral examination** | **30** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |