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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | Faculty of Occupational Safety in Niš |
| **GENERAL INFORMATION** |
| Study program  | Environmental Protection |
| Study Module (if applicable) | / |
| Course title | Energetic Efficiency |
| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☐ Obligatory ☒ Elective |
| Semester  |  ☐ Autumn ☒Spring |
| Year of study  | Third year |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Ljiljana Živković, Jasmina Radosavljević |
| Teaching mode |  ☒Lectures ☒Group tutorials ☐ Individual tutorials ☐Laboratory work ☒ Project work ☒ Seminar ☐Distance learning ☐ Blended learning ☒ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Students will acquire necessary knowledge about different aspects of energy efficiency in building design and construction. They will be able to technically and economically asses, and propose measures for solving, problems of efficient energy use in building design and construction, as well as to use hardware and software technologies to analyze energy efficiency of buildings. They will become familiar with the required licencing procedures for engineers qualified to certify energy efficient buildings and with the licencing procedures for companies that issue building energy efficiency certificates.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Energy balance of a building. Building envelope. Ventilation and HVAC systems in buildings. Building lighting. Energy efficient electric devices. Centralized energy management and control in buildings. Microgeneration. Utilization of renewable energy sources in building design and construction. Comfort parameters. Building energy efficiency measures. Energy inspections and building certification. Green and passive buildings. Examples of good practice in Serbia and abroad.  |
| **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** | **10** | **Written examination** | **20** |
| **Practical teaching** |  | **Oral examination** | **20** |
| **Teaching colloquia** | **50** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |