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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) | All |
| Course title | Engineering education and sustainable development |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | IV |
| Number of ECTS allocated | 3 |
| Name of lecturer/lecturers | Vanče S. Bojkov |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| The expected outcomes include knowledge on principles on which the concept of sustainablity is based, the implementation of moral norms in the formation of critical evaluation of strategies for the protection of environment and sustainable development in the specifc spacial, social and cultural conditions in which engineering acting is done. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **The origin of the term and the historical development of the idea of education. Education of engineers in Serbia. The concept of contemporary society. Technological changes, knowledge and new materials. Engineering, engineering ethics and the relevance of ethics in technics and society. Sustainable development. Philosophy, principles and practice of the sustainable development. Visions and approaches to sustainable development. The role of the interantional community in the formation of 'planetar' politics of sustainable development policy. World forums and strategic documents on establishing priorities, aims and the policy of sustainable development on both global and local levels. Sustainable development as an alternative to traditional political and economical paradigm. The role of technology in the sustainable development. Sustainable development and the technology changes. Dependence on technological changes, the failure of techonological improvements and the failure of adopting alternative technologies. Preventive engineering and sustainable development. Instruments for ecological politics. European programs, funds and projects. Ecological consequences and scientific technological revolutions.**  |
| **LANGUAGE OF INSTRUCTION** |
| [ ] Serbian (complete course) [ ]  English (complete course) [ ]  Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)[x] 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** | **10** | **Oral examination** | **20** |
| **Teaching colloquia** | **40** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |