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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | TECHNOLOGY |
| **GENERAL INFORMATION** |
| Study program  | TECHNOLOGICAL ENGINEERING |
| Study Module (if applicable) | pharmaceutical and cosmetic engineering, organic chemical technology and polymer engineering, ecological engineering, food engineering, textil engineering |
| Course title | Thermodynamics |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [x]  Obligatory [ ]  Elective |
| Semester  |  [x]  Autumn [ ] Spring |
| Year of study  | 2 |
| Number of ECTS allocated | 7 |
| Name of lecturer/lecturers | Stanisa Stojiljkovic |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Teaching students with basic thermodynamic laws, processes, machines and devices. Students master the theoretical teaching and engineering methods of measurement and transformation of thermodynamic properties and size changes of state. Students learn about the terodinamičkim processes in technical and some biological systems |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| Basic laws of thermodynamics. Gas mixed. Real gases and vapors. Moist air. Steam processes. Cooling processes. Heat transfer by conduction, convection and radiation. Calculation of the heat exchanger. Alternative sources of energy. Combustion. Thermodynamics of living systems.  |
| 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** | **10** | **Written examination** | **40** |
| **Practical teaching** |  | **Oral examination** | **30** |
| **Teaching colloquia** | **20** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |