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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | | Faculty of Technology, Leskovac | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **CHEMICAL TECHNOLOGIES** | | |
| Study Module (if applicable) | | | | ECOLOGICAL ENGINEERING | | |
| Course title | | | | Heat exchangers design | | |
| Level of study | | | | Bachelor  Master’s  Doctoral | | |
| Type of course | | | | Obligatory  Elective | | |
| Semester | | | | Autumn Spring | | |
| Year of study | | | | IV | | |
| Number of ECTS allocated | | | | 5 | | |
| Name of lecturer/lecturers | | | | Predrag Rašković | | |
| Teaching mode | | | | Lectures Group tutorials  Individual tutorials  Laboratory work  Project work  Seminar  Distance learning  Blended learning  Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| This course provides an Introduction to heat exchangers (types, applications, materials, specification and selection), heat transfer correlations and methodology for thermal design of heat exchangers. | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| Topics covered: Types of heat exchangers, working fluids in heat exchangers, recuperative heat exchangers, Heat transfer correlations, Parallel flow, Counter flow and Cross flow; Fouling factors, Pressure drop calculations, Selection criteria of heat exchangers, Thermal design and analysis of: shell and tube heat exchangers, condensers, evaporators, plate heat exchangers, evaporative heat exchangers. | | | | | | |
| **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** | | | **30** |
| **Practical teaching** |  | | **Oral examination** | | | **30** |
| **Teaching colloquia** |  | |  | | |  |
| **Seminar papers** | **30** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |