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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty** |  |
| **GENERAL INFORMATION** |
| Study program  |

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| CHEMICAL TECHNOLOGIES, FOOD TECHNOLOGY AND BIOTECHNOLOGY  |
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 |
| Study Module (if applicable) |

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| ECOLOGICAL ENGINEERING,PHARMACEUTICAL AND COSMETIC ENGINEERING,ORGANIC CHEMICAL TECHNOLOGY AND POLYMER ENGINEERING, FOOD TECHNOLOGY, BIOTECHNOLOGY |
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| Course title |

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| Chemical process design  |

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| Level of study | ☒Bachelor ☐ Master’s ☐ Doctoral |
| Type of course | ☒ Obligatory ☐ Elective |
| Semester  | ☒ Autumn ☐Spring |
| Year of study  | 4 |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Ivana Banković-Ilić |
| Teaching mode | ☒Lectures ☐Group tutorials ☐ Individual tutorials☐Laboratory work ☒ Project work ☐ Seminar☐Distance learning ☐ Blended learning ☐ Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| Process synthesis by defining and elaboration of preliminary project elements. The students qualification for individual work and creation of new technological processes and application in many industrial practical problems. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| The term, level, structure and area of processes design. Techno-economic projects. Preliminary, detailed and complete projects. Elements of preliminary project. Definition of problem task, chemical and technological conceptions, process flowsheet, material and energy balances, quality and packing of raw materials and products, the infrastructure elements, selection and design of equipment. The estimates of capital investments. The optimization of process design strategy.  |
| **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** |  |
| **Practical teaching** | **40** | **Oral examination** | **50** |
| **Teaching colloquia** |  | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |