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| **UNIVERSITY OF NIŠ** | | | | | | |
| **Course Unit Descriptor** | | **Faculty** | | |  | |
| **GENERAL INFORMATION** | | | | | | |
| Study program | | | | **Computer Science** | | |
| Study Module (if applicable) | | | |  | | |
| Course title | | | | Object Oriented Programming II | | |
| Level of study | | | | Bachelor  Master’s  Doctoral | | |
| Type of course | | | | Obligatory  Elective | | |
| Semester | | | | Autumn Spring | | |
| Year of study | | | | 2 | | |
| Number of ECTS allocated | | | | 7 | | |
| Name of lecturer/lecturers | | | | Branimir Todorovic, Dejan Kolundžija | | |
| Teaching mode | | | | Lectures Group tutorials  Individual tutorials  Laboratory work  Project work  Seminar  Distance learning  Blended learning  Other | | |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** | | | | | | |
| *Introducing advanced object oriented programming and implementation of design patterns in C++* | | | | | | |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** | | | | | | |
| **Input output streams in C++. Recapitulation of object oriented programming concepts (aggregation, delegation, consultation, cohesion, inheritance, polymorphism and template programming) in C++, and their application in implementation of some of object oriented design patterns: creational(abstract factory, factory method, prototype, singleton), structural(adapter, bridge, composite, decorator, façade, flyweight, proxy) and behavioral(iterator, command, chain of responsibility, mediator, memento, state, observer, strategy, template method, visitor).** | | | | | | |
| **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** | **5** | | **Written examination** | | | **30** |
| **Practical teaching** |  | | **Oral examination** | | | **35** |
| **Teaching colloquia** | **30** | | **OVERALL SUM** | | | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** | | | | | | |