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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 | [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 | Branimir Todorovic, Dejan Kolundžija |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [x] 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** |
| [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** | **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** |