

Specification for the book of courses

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|--|---|--|--------------------------------|----------------------|
| Study program | | Electrical Engineering and Computer Science | | |
| Module | | Computing and Informatics | | |
| Type and level of studies | | Undergraduate Academic Studies | | |
| The name of the course | | Software Engineering | | |
| Lecturer (for lectures) | | Rančić D. Dejan, Milosavljević Lj. Aleksandar | | |
| Lecturer/associate (for exercises) | | Mihajlović T. Vladan, Antolović D. Igor, Petrović N. Nenad | | |
| Lecturer/associate (for OFE) | | Mihajlović T. Vladan, Antolović D. Igor, Petrović N. Nenad | | |
| Number of ECTS | 6 | Course status (obligatory/elective) | Obligatory | |
| Prerequisites | | | | |
| Course objectives | Mastering the basic knowledge necessary for the development and evolution of software systems. | | | |
| Course outcomes | Theoretical and practical knowledge on the development and evolution of software systems and work in the team for the implementation of software projects. | | | |
| Course outline | | | | |
| Theoretical teaching | Introduction and the need for software engineering. Models of software development. Software processes. Agile software development. Basic activities in the management of software projects. Requirements engineering methods. Software Architectures. Software design. Principles of software development. Validation and verification. Systematic software testing. Software metrics. Software maintenance and evolution. | | | |
| Practical teaching (exercises, OFE, study and research) | Project Management. Project plan. Project documentation. System vision. Requirements analysis and domain modeling. Requirement specification. Software architecture document. Test plan. Test specification. Test report. User documentation. | | | |
| Textbooks/references | | | | |
| 1 | I. Sommerville, Software Engineering, 9th ed., Addison-Wesley, 2011. | | | |
| 2 | R. Pressman, Software Engineering A Practitioner's Approach, 7th ed., McGraw-Hill, 2010. | | | |
| 3 | Eric J. Braude, Software Engineering - An Object-oriented Perspective, Johns Wiley & Sons, 2001. | | | |
| 4 | | | | |
| 5 | | | | |
| Number of classes of active education per week during semester/trimester/year | | | | |
| Lectures | Exercises | OFE | Study and research work | Other classes |
| 2 | 2 | 1 | 0 | 0 |
| Teaching methods | Lectures, auditory exercises, laboratory exercises. | | | |
| Grade (maximum number of points 100) | | | | |
| Pre-exam duties | | Points | Final exam | Points |
| Activity during lectures | | 10 | Written exam | |
| Exercises | | | Oral exam | 40 |
| Colloquia | | 40 | | |
| Projects | | 10 | | |