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| Discipline „software production technology”, code: 31 |
| Annotation: This course is based on the theoretic and practical knowledge of the students of the previous courses “Object-oriented programming”, “Program Systems”, etc. The goal of Software Engineering is the construction of complex, maintainable software at reasonable cost. Software engineering applies both computer science and engineering principles and best practices to the design, implementation, testing, maintenance and evolution of software. This course covers not only the technical aspects of building software systems, but also management issues. Today, software engineering, as a discipline, is a cornerstone of the information technology sector and a significant factor in our economy. The course will focus on the problems, design, techniques, and tools which are involved with the development of large software systems by groups of people. Methods for software specification and design are emphasized. Additional topics include design for change, configuration management, and software tools. The main objective of the discipline is to combine the knowledge gained so far into a unified system covering the whole life cycle of the software by using a modern integrated environment for developing Windows Forms applications and teamwork. For this purpose, during laboratory work, Visual Studio.Net environment and C# language are used for software project development. The course is related to a number of further disciplines, both in Bachelor's and Master's degree. |
| Main issues of the syllabus content:* Software Life Cycle and Software Development Processes
* Software maintenance and documentation
* The Human Factor in Software Production
* Software Quality metrics
* Testing and Other Verification Methods
* Software change strategies
* Interaction Styles (User interface design)
* Software Cost Estimation methods
* Software Change strategies
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