

DESCRIPTION OF STUDY MODULE*

Study programme Applied Informatics and Programming

Study module IT PROJECT MANAGEMENT **Credits in total** 3

Learning outcomes

- Understand and are able to explain project management processes.
- Understand and are able to explain different Agile methodologies (SCRUM, Kanban, Extreme Programming, Lean). Knows advantages and disadvantages of these methodologies.
- Has a deep understanding of the Scrum project management method. Correctly use project management terminology.
- Able to choose appropriate project management methods depending on the project.
- Able to plan project activities regarding time and budget.
- Able to apply the SCRUM methodology in practice and use Planio.io tool.
- Able to use MS Project package for classical project management processes.
- Smoothly and suggestively express project and its idea.
- Able to prepare project documentation.
- Able to communicate with each other through group work.
- Able to work in a team, assume responsibility for the quality of assigned task
- Able to manage project team, responsibly assess the team leader, the members
- Understand the importance of development skills for their professional growth.
- Develop the need to independently improve their project management skills.

Aims of study module

The objective of the subject is to provide knowledge and practical skills needed for high-quality software product development process, ensuring project progress control and management

Annotation of a study module

During the course, students analyze software product management features to ensure their quality and compliance with standards. The course begins with introduction to standard project management processes: project planning, time, cost, quality, human resources and risk management. Then students learn to use MS Project package. Later they are introduced to Agile methodologies (SCRUM, Kanban, Extreme Programming, Lean) which are compared with each other highlighting their main features. Project management using SCRUM methodology is analyzed in more detail. Planio.io tool is tested.

Topics of the subject

1. Introduction to project management
2. Project integration and scope management
3. Project time management
4. Project cost management
5. Project quality management
6. Project Human Resources and Communication Management
7. Project risk management
8. Agile project management
9. Different project management methodologies
10. Components of Scrum
11. Process: sprints.
12. Reporting
13. Comparison of different Agile methodologies.

Procedure for assessment of knowledge and competences

10-point grading scale and cumulative assessment method: each control test (CT) is worth 15%, project (P) – 20%, and examination (E) - 50% of the total grade, which is calculated by the method of weighted mean. Final grade of the course is calculated only when all of the assignments are successfully completed and midterms are passed:
 $G = CT1*0.15+CT2*0.15+P*0.3+E*0.5$

Main literature

1. Schwalbe, K. (2015). *Information Technology Project Management*. 8th edition. Cengage Learning
2. Robert, K. Wysocki (2013). *Effective Project Management: Traditional, Agile, Extreme*. 7th Edition. Wiley.
3. Kenneth, S., R. (2012). *Essential Scrum: A Practical Guide to the Most Popular Agile Process*. Addison-Wesley.

* Short form