<table>
<tr><td>Subject code:
P.2(3)</td><td colspan="3">Subject name: Management of software development</td></tr>
<tr><td>Study load:
2 ECTS</td><td>Load of contact hours: 50</td><td>Study semester:
Autumn</td><td>Assessment:
5-point grade credit</td></tr>
<tr><td>Objectives:</td><td colspan="3">The goal of this course is to cover all basic processes and areas of software development and support project management.</td></tr>
<tr><td>Course outline:</td><td colspan="3">Topics covered:
1. Key terms, methodologies and project types
2. Project documentation.
3. Development team management.
4. Communications.
5. Software quality assurance
6. Project infrastructure and legacy code
7. Environments, CI/CD
8. Project release.
Contact lessons are divided into two parts: lectures and project management workshops with team tasks and specific roles assigned to each student.</td></tr>
<tr><td>Learning Outcomes:</td><td colspan="3">The students should know the main terms of software development management, distinguish the main project types and select correct approach and style of managing the project.
The students should be able to set up the processes of development, quality assurance, software delivery and maintenance for any project.</td></tr>
<tr><td>Assessment Methods:</td><td colspan="3">Assessment is split into two parts: team-based activities (60 points) and the viva voice examination in the end of the course (40 points).</td></tr>
<tr><td>Teacher(s):</td><td colspan="3">Petr Lysachev</td></tr>
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<tr><td></td><td></td></tr>
<tr><td>Prerequisite subject(s):</td><td>None</td></tr>
<tr><td>Compulsory Literature:</td><td>PMBOK® Guide 6th Edition</td></tr>
<tr><td>Replacement Literature:</td><td>PMBOK® Guide 5th Edition

Making Things Happen: Mastering Project Management, Scott Berkun

The Plugged-In Manager: Get in Tune with Your People, Technology, and Organization to Thrive, Terri L. Griffith</td></tr>
<tr><td>Participation requirements:</td><td>Lower limit of lectures attendance is 80%, each student must take part into team workshops.</td></tr>
<tr><td>Independent work:</td><td>1. RFP preparation
2. Communication with customer, BA phase
3. Shaping the solution
4. Work breakdown structure
5. Estimates workshop
6. Project plan
7. Writing the Proposal
8. Planning deployments and maintenance</td></tr>
<tr><td>Grading criteria scale or the minimal level necessary for passing the subject:</td><td><table><tr><td>Failed</td><td>< 50 points</td></tr><tr><td>Satisfactory</td><td>>= 50 points
< 70 points</td></tr></table></td></tr>
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	<table><tr><td>Good</td><td>>= 70 points < 90 points</td></tr><tr><td>Excellent</td><td>>= 90 points</td></tr></table> **Points distribution:** **Ongoing assessment:** Workshop team activities: 10 points/each **Final Examination** Viva voice examination in the end of the course: 40 points
Information about the course:	Room ___, on ___ at ___
1) Date 1	**Practical class 1** Grouping students in the teams, selecting a project topic for the each team, assigning roles to a team member.
2) Date 2	**Lecture 1** Classroom presentation: 1. Key term: goal, project, project types, team 2. Waterfall methodology, iterative methodologies. Choosing methodology basing on project type and other factors **Practical class 2** Meeting with a customer
3) Date 3	**Practical class 3** Meeting with a customer
4) Date 4	**Lecture 2** Classroom presentation:

	Project documentation. Non-disclosure agreement. Request for Proposal, Proposal, Statement of Work, Master Service Agreement **Practical class 4** RFP preparation
5) Date 5	**Practical class 5** RFP review
6) Date 6	**Lecture 3** Team management. Styles of management. Conflict management. Personnel motivation. Team performance increase. **Practical class 6** Work breakdown structure preparation
7) Date 7	**Practical class 7** Work breakdown structure review and refinement
8) Date 8	**Lecture 4** Communications. Information flow in the team. Customer expectations management. **Practical class 8** Project schedule preparation, team composition
9) Date 9	**Practical class 9** Project schedule review
10) Date 10	**Lecture 5** Types of software testing. Unit tests, automated testing, load testing, stress-tests. **Practical class 10** Test cases writing, check lists preparation.
11) Date 11	**Practical class 11** Risks registry preparation and review, dependencies tracking
12) Date 12	**Lecture 6**

	Project infrastructure. Existing systems extension, support of legacy code. Refactoring. Data migration **Practical class 12** Proposal preparation
13) Date 13	**Practical class 13** Proposal preparation
14) Date 14	**Lecture 7** Environments: Dev, QA, Staging and Production. Continuous integration and continuous deployment. **Practical class 14** Proposal review
15) Date 15	**Practical class 15** Proposal review
16) Date 16	**Lecture 8** Going into production. Back-up plans. System deployment. System support and maintenance. Project finishing. Routines for closing the project **Practical class 16** Release planning, release checklists
17) Date 17	**Practical class 17** Course retrospective, answering the questions.