**Software Process and Management**

**Overview**

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| Level | 3 (Semester 6) |
| Duration | 4 weeks |
| Lectures | 10x40 minutes/week for 2 weeks |
| Practicals/tutorials | 5x2 hours/week for 3 weeks |

**Learning Outcomes**

* Ability to define and manage (software) projects
* An ability to recognize the context of projects
* A deep understanding of software development activities and their organization
* An operative knowledge of how to manage goals, time and costs
* An operative knowledge of how to manage changes, risks and quality
* An operative knowledge of how to manage people and how to organize communications
* Knowledge and understanding of software project pricing and procurement
* Knowledge and understanding of software development methodologies: Traditional, Agile, Unified, Open Source
* Knowledge and understanding of Development and Management Standards
* Operative knowledge of open source Tools for Managing Projects

**Syllabus**

* Introduction to projects and project management
* Software Development Projects and Stakeholders
* (Traditional) Software Development Activities
* Project Initiation: Feasibility and Project Authorization
* Formalizing the Project Goals
* Deciding the work to be performed (Work Breakdown Structure)
* Estimating: duration, effort, manpower
* Function Points
* Constructive Cost Modelling
* Object Points
* Project Scheduling
* Optimizing the Plan
* Cost and Budgeting
* Project Execution, Monitoring, and Control
* Agile Monitoring and Control
* Project Closing
* Managing Changes
* Risk Management
* Quality Management
* Managing People
* Organizational Structures
* Managing Communication
* Project Pricing
* Traditional Software Development Processes
* Agile Software Development