Courses in English
Course Description

Department 06 Applied Sciences and Mechatronics
Course title Project Management
Hours per week (SWS) 4
Number of ECTS credits 6

Course objective
With reference to the higher-level objectives of the technical master programs, this module imparts interdisciplinary qualifications in the field of engineering management. Students learn about methods and tools for effective, cost efficient and timely transformation of research results into marketable products. Successful participants understand the importance of social skills, communication and collaboration as a basis for successful project work and project management. The individuals personal development in these areas is supported by the choice of teaching methods. After successfully completing the module, students understand the essential competence elements according to the ICB/NCB standard defined by IPMA/GPM. They are able to judge their own way of working in projects with regard to project success. They can apply the methods and tools discussed as part of the module to planning and controlling small projects and parts of larger projects.

Prerequisites
recommended: Basics in physics, chemistry, and physical chemistry

Recommended reading
Schelle, Ottmann, Pfeiffer, "Project Manager", GPM, 2006.
Michael Gessler (Hrsg.), "Kompetenzbasiertes Projektmanagement (PM3)", GPM, 2009 (1. Aufl.) - 2015 (7. Aufl.).
Michael Gessler (Hrsg.), "Basiszertifikat im Projektmanagement (GPM)", GPM, 2014 (6. Aufl.).

Teaching methods
seminaristic teaching with exercises

Assessment methods
40% written exam, 60% project

Language of instruction
English

Name of lecturer
Prof. Torsten Mahnke

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Link
### Course content

- What are projects and what is project management?
- Start-up process
- Project start
- Scope and deliverables
- Requirements and objectives
- Interested parties
- Project phases
- Quality
- Risk and opportunities
- Contracts
- Planning
- Project organisation
- Project structures
- Progress and time
- Resources
- Cost and finance
- Procurement
- Information and documentation
- Execution
- Configuration and change
- Controlling
- Communication
- Teamwork
- Problem resolution
- Close-out

### Remarks

- Students of Dep.06 have priority