Courses in English
Course Description

Department 08 Geoinformatics
Course title Project and Innovation Management
Hours per week (SWS) 4
Number of ECTS credits 5

Course objective
The interdisciplinary module teaches students the basics of technology and innovation management (TIM), which contributes to ensure innovation ability and business success in business and industry. This includes subjects of Project- and Information management (PIM). Students will learn about different methods and tools of TIM (e.g. strategic analysis, innovation strategy development, strategy implementation, monitoring, evaluation, and feedback), and can systematically use these tools to solve case studies and exercises. They are able to understand the technology development and innovation process, to identify success factors in innovation management and to design processes accordingly. The course participants will practice and master various creativity techniques, become familiar with patent management, and acquire a holistic approach of TIM.

Prerequisites

Recommended reading

Teaching methods case studies; exercises; seminar paper; Seminaristic teaching
Assessment methods Written examination
Language of instruction English/German, Teaching materials in English
Name of lecturer Prof. Dr.-Ing. MBA Gia Khanh Pham
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Course content

1. Introduction, importance of TIM in companies and organisations
2. Basics of technology and innovation management
2.1 Terms and definitions of TIM
2.2 Innovation cycle and product life cycle
2.3 Types of innovation strategies
2.4 Innovation as a management task
2.4.1 Strategic analysis of initial situation (PE TEL, WOT, WA…)
2.4.2 Innovation strategy integrated in corporate strategy
2.4.3 Options, constraints and influencing factors
3. Innovation management process
3.1 Designing the corporate innovation system
3.2 Promoters and teams
3.3 Product, process and business model innovation
3.4 Open innovation and closed innovation
3.5 Target setting, development, steering and evaluation of innovation processes
3.6 Creativity techniques
3.7 Technology and product development
3.8 Invention disclosure and patent management
4. Success factors of innovation management
4.1 Corporate culture and innovation culture
4.2 Influence of soft and hard factors
4.3 People, leadership and soft skills
4.4 Success factors and challenges of innovation management in large corporations and SMEs
4.5 Holistic approach of innovation management
5. Case studies, exercises, work in small groups

Remarks