

Softskills

1	Module Number 3914	Study Programme ASM	Semester 1	Offered in WS	Duration 1 Semester	Module Type compulsory	Workload (h) 210	ECTS Points 7
2	Courses		Teaching and Learning Forms		Contact Time		Self-Study Time	Language
					(SWS)	(h)	(h)	
	a) Global Engineering		Lecture		2	45	105	Englisch
	b) Project Management		Lecture		2	45		
	c) International Negotiations		Lecture		2	45		
						[1 SWS = 15h]		

3 Learning Outcomes and Competences

Once the module has been successfully completed, the students can...

Knowledge and Understanding

- ... understand sales & marketing aspects of global engineering projects.
- ... understand different approaches towards global engineering projects (waterfall, agile, hybrid project management).
- ... develop a project plan, split complex tasks into subtasks.
- ... apply the knowledge from lectures and labs on a real application.
- ... understand the limitations of project time and human resources.
- ... know about Intellectual properties and patent topics in engineering
- ... know cultural differences.
- ... improve language and mimic as a tool of successful interaction
- ... understand mechanisms of multilateral business and trade formals

Use, Application and Generation of Knowledge

Use and Transfer

- ... be able to choose the right right engineering approach in relation to the market needs
- ... use methods and tools of project management.
- ... understand the principles of Global Engineering.
- ... interpret gantt-charts, calculate the time and financial aspects of projects.
- ... include and consult IP and patent experts in a professional manner and know when appropriate
- ... use state-of –the-art software support for projects
- ... apply the gained knowledge to case-studies.
- ... improve cooperation within your own unit / company
- ... improve company customer relationships
- ... come to better results with international partners
- ... being able to estimate the economic impact of IPR
- ... transfer engineering results to production

Scientific Innovation

- $\bullet \quad \dots$ describe the dependency of R&D, production, sales & finance of projects.
- ... apply scientific methods to solve engineering tasks.
- ... discuss pros and cons of different project management approaches.

Communication und Cooperation

- ... work together according to a project plan
- ... take into account cultural differences in working style, leadership and communication.
- ... cooperate within diverse international groups in order to find adequate solutions for the project task.
- ... lead project teams
- ... achieve more satisfying business output of international negotiations



- ... use the right negotiation options according to the specific (cultural) counterparts
- ... handle difficult situations and settle conflicts peacefully

Scientific Self-Conception/ Professionalism

• ...work successfully in international development groups in industry.

4 Contents

a) and b) (Global Engineering & Project Management)

- Sales & Marketing Aspects of Engineering Projects
 - Project lifecycle and analysis
 - Branding
 - Key Account Management
 - Customer Management
 - Bid management
- Intellectual Property and Patents
 - Basics of Intellectual Property Rights (IPR)
 - Global Corporate Patent Strategy and Management
 - Company examples
- Classical Project Management
 - Project Management Processes
 - Functions and responsibilities of a project manager
 - Scope, Time, Quality & Risk Management
 - Communications, HR & Integration Management
 - Documentation, reporting, presentation, decision making
- Agile and Hybrid Project Management
 - Overview of different agile methods
 - Scrum
 - Integration of classical and agile methods
- Critical Chain Project Management (CCPM)
 - Gamification with theoretical inputs
 - application of project management to a case study
- Supporting IT structures
 - IT Network and Infrastructure
 - IT Organisation
 - IT Security
 - Managing Product Data
 - From Engineering to Production

c) International Negotiations

- Background teaching of cultural differences
- Interactive / international role plays
- Exchanging of experiences of business and other cross-cultural transactions and achievements / failures.
- Discourse and examples aimed at improving individual skills / arguments.
- Win-win situations learning different methods of negotiations

Participation Requirements

- compulsory: -
- recommended: Negotiation English

Some basic business experience Basic multicultural skills

6 Examination Forms and Prerequisites for Awarding ECTS Points

120 min written exam

7 Further Use of Module

Module Team Project, Preparation for Master thesis, Preparation for negotiations in job situations

8 Module Manager and Full-Time Lecturer



Prof. Dr. Siegfried Zürn
- plus external experts and lecturers

Literature

Script and case studies will be provided in electronic format
PMBOK Guide 8th edition, PMI Institute
Larson, E.W.; C.F. Gray (2016): Project Management – The Managerial Process, McGraw-Hill

Mühlen, Alexander (2010): International Negotiations, Münster Verlag, 2010

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