Syllabus

BAE2542 Innovation Management

Prof. Dr.-Ing. Philipp Jakob

Winter Semester 2025/2026

Level	Bachelor	
Credits	3	
Student Contact Hours	2	
Workload	90 hours	
Prerequisites	none	
Time	s. LSF	
Room	s. LSF	
Start Date	s. LSF	
Lecturer(s)	**Name**	Prof. Dr.-Ing. Philipp Jakob
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Summary

Competitive products form the basis for the economic success of companies. However, this can only be ensured in the long term if all product-related measures of a company, from the development of customer-oriented products to the optimal design of the product life cycle, are carried out effectively and efficiently through systematic innovation and product management. Key aspects of innovation and product management are taught based on a process-oriented structure.
Students learn the basic tools of process management that are needed to plan, monitor and control a business and to ensure the effectiveness and efficiency of a company (e.g. process-oriented measurement, process-based reporting, process-based organization).

Outline of the Course

Lecture outline:

- Fundamentals of product and innovation management
- Prerequisites for innovation
- Organization of the innovation process: methodology and tools
- Product development, prototyping, market testing
- Analysis and optimization

The lecture is supplemented by practical examples and exercises.

Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes		Course Intended Learning Outcomes
	After completion of the program the students will be able…	After completion of the course the students will be able…
1	**Expert Knowledge**	
1.8	…to demonstrate profound expert knowledge in their field of specialization.	…to identify and analyze innovation management strategies in the areas of product development, product management, processes, and business models.
2	**Digital Skills**	
3	**Critical Thinking and Analytical Competence**	
3.1	...to implement adequate methods in a competent manner and to apply them to complex problems.	…to understand how organisations' ownership and structure affect innovation and growth: • Explain how the type of ownership of organisations may affect organisational innovation and growth • Analyse how the structure of different organisations may affect innovation and growth
3.2	...to critically reflect and interpret findings and to develop comprehensive solutions for complex problems.	…to understand how innovation contributes to different types of organisational growth: • Examine different types of organisational growth in different organisations • Explain how innovation can lead to different types of organisational growth • Evaluate how innovation can provide competitive advantage to achieve different types of organisational growth
4	**Ethical Awareness**	
5	**Communication and Collaboration Skills**	
6	**Internationalization**	
6.1	...to understand and explain business challenges in an international context.	…to understand how organisations' ownership and structure affect innovation and growth: • Explain how the type of ownership of organisations may affect organisational innovation and growth • Analyse how the structure of different organisations may affect innovation and growth

Teaching and Learning Approach

The theoretical key knowledge and the basic concepts are taught at the lecture. The students gain the methodology and the guidance to know and to implement the introduced concepts and tools. Questions and comments of the students are welcome during the lecture.
After the lecture the students should reflect and sum up the content of the lecture based on course materials provided.
The theoretical knowledge is enlarged and converted into a practical role by case studies and examples. An active participation in class is an important part of the teaching and learning approach.

Literature and Course Materials

- Stern, T.; Jaberg, H. (2010): Erfolgreiches Innovationsmanagement: Erfolgsfaktoren – Grundmuster – Fallbeispiele. Gabler Verlag | Springer Fachmedien Wiesbaden
- Gadatsch, A. (2017): Grundkurs Geschäftsprozess-Management: Analyse, Modellierung, Optimierung und Controlling von Prozessen. Springer Vieweg, Wiesbaden.
- Gaubinger K. et al (2015): Innovation and Product Management – A Holistic and Practical Approach to Uncertainty Reduction. Springer-Verlag. Berlin
- Becker, J.; Kugeler, M.; Rosemann, M. (2008): Prozessmanagement – Ein Leitfaden zur prozessorientierten Organisationsgestaltung. 6th edition, Berlin: Springer.
- Horváth & Partners (2005): Prozessmanagement umsetzen. Stuttgart: Schäffer-Poeschel.

- Mayer, R. (1998): Prozeßkostenrechnung – State of the Art; Prozeßkostenmanagement. 2nd edition, Stuttgart: n.p..
- Lunau, S. / Staudter, C. et al. (2013): Design for Six Sigma+Lean Toolset. Mindset for Successful Innovations. Berlin et al.: Springer.

Assessment

Exam

There is a written exam at the end of the semester (module exam, 60 min) and/or a project presentation jointly defined.

Grading, based on exam results:
'Very good' (A grade) signifies that the performance is above and beyond expectations.
'Good' (B grade) means that the performance is good and above average.
'Satisfactory' (C grade) means that it is an average performance containing insufficiencies but principally appropriate to the expectations.
'Adequate' (D grade) describes a below-average performance with obvious deficiencies.
'Inadequate' (E grade) is an unacceptable performance that is not sufficient to any expectations.

Schedule

The exact schedule will be announced during the lecture.

Academic Integrity and Student Responsibility

The lecturer appreciates a substantial exchange between the students, because the fellow students may have valuable contributions to the comprehension of occurring problems or questions.

Following the arguments, collaboration and also an autonomous exercise solving or the discussions on upcoming questions within the lectures are fundamental for a clearer understanding of the subject matter.

Large class sizes and foreign languages imply a risk of a high noise level, which has a strong negative influence on the work climate, knowledge acquisition and collaboration. Predominantly, a high noise level is caused by a few group members. These 'troublemakers' hinder the other ones from being able to concentrate and therefore won't be tolerated and will be ejected from the class.

Please note that audio and video recordings during lectures, seminars and labs are permitted only with the explicit consent of the lecturer and all other persons present. Without this consent, recordings are not allowed.

Code of Conduct for Students

Link to the Code of Conduct for online Teaching

Teaching Philosophy

My aim is to ensure that you have a successful learning progress and an understanding of the practical importance of the learning content. When you don't understand a learning step, you should pose a question during the lesson. I want to support every student who is committed to take the required knowledge and to pass the exams successfully.

Additional Information

Further details to be announced via e-learning (sign in and check regularly!)

Language: English