

Technology and Innovation Management: Introduction (Master)

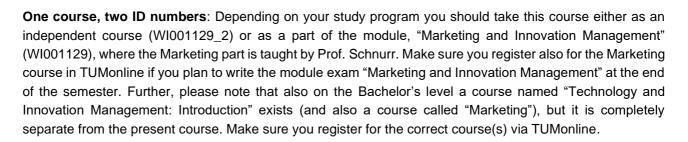
WI001129

Dr. Jisoo Hur

Summer Semester 2025

Language: English

Occurrence: Summer semester



Scheduling: The course will be taught in person in lecture hall N1190, each Monday 4:45 till 6:15 pm, from April 28th through July 21st. The lecture will be recorded. The recorded videos will be uploaded to Moodle. There is no lecture scheduled for the bank holidays (June 9th).

Registration: You need to register via TUMonline for the course and the exam. The exam registration window will likely last from May 26th until June 30th; please check the official deadline provided by the examination office. If you want to write the individual exam (not including Marketing), please register for the exam called "Technology and Innovation Management: Introduction" (WI001129_2). If you want to write the module exam, please register for the exam called "Marketing and Innovation Management" (WI001129)

Description of Achievement and Assessment Methods: Participants will be assessed based on a one-hour closed-book exam (100% multiple choice). For the module "Marketing and Innovation Management" (WI001129VO), participants will be assessed based on a two-hour closed-book exam (100% multiple choice).

Prerequisites: None.

Modules:

M1 Introduction

M2 Patterns in Innovative Activity
M3 Who innovates, and why?

M4 Innovation Strategy

M5 Profiting from Innovation

M6 Protecting Intellectual Property (IP)
 M7 Designing the Innovation Process /
 M8.1 Organizing R&D and Innovation

M8.2 Individuals in R&D

Guest speakers:

Ana-Mariya Madzhurova, Policy Officer, Fair Standards Alliance Dr. Thorsten Löwer, Managing Director, pro-beam Maria Sievert, Founder & CEO, Inveox

Main questions addressed in the course:

- Where does innovation come from?
- What defines "innovation"?
- Who innovates and why?
- Why, and what for should the firm innovate?
- How can innovation be strategized?
- How can a firm secure profit from an innovation?
- How do you implement innovation?
- How do you design an innovation process?
- Which tools and techniques exist in this context?
- How do you manage the process, people, interfaces, etc.?

Intended learning outcomes:

Understand the definitions and concepts of invention, research, technological development and innovation Understand the main models of innovation

Use and apply tools of innovation management

Comprehend the main mechanisms to capture value from innovation

Teaching and learning methods: The course consists of lectures, literature study, and guest lectures by practitioners.

Reading list (all material available on Moodle):

Listed below are the compulsory readings. They are strongly recommended for the exam. In addition, you find some recommended readings on Moodle.

M1 Afuah, A. (2020). Innovation management-strategies, implementation, and profits. (Chapter 2)

M4 Dodgson, M., Gann, D. M., & Salter, A. (2008). The management of technological innovation: strategy and practice. Oxford University Press on Demand. (Chapter 4)

M5 Ceccagnoli, M., & Rothaermel, F. T. (2008). Appropriating the returns from innovation. In Technological innovation: Generating economic results. Emerald Group Publishing Limited.

M6 Schilling, M. A. (2020). Protecting Innovation. In: Strategic Management of Technological Innovation, 6th edition, Chapter 9. McGraw-Hill Education.

M7/9 Schilling, M. A. (2020). Managing the New Product Development Process. In: Strategic Management of Technological Innovation, 6th edition, Chapter 11. McGraw-Hill Education.

Inquiries: Please pose any questions you might have on Moodle, so that all course participants can benefit from the responses. For sensitive/personal questions, you may of course contact the people responsible for the course via email.

Responsible for the course: Dr. Jisoo Hur, Prof. Dr. Joachim Henkel *(currently on sabbatical)*. In the summer semester of 2026, this lecture will be held by Prof. Dr. Joachim Henkel.