

Technology and Innovation Management: Introduction (Bachelor)

WI000114, WI000820

Dr. Jisoo Hur

Summer Semester 2025



Language: English

Occurrence: Summer semester

One course, two ID numbers: Depending on your study program, you should take this course either as an independent course (WI000114) or as a part of the module, “Marketing and Innovation Management” (WI000820), where the Marketing part is taught by Prof. Königstorfer. Make sure you also register for the Marketing course in TUMonline if you plan to write the module exam “Marketing and Innovation Management” at the end of the semester. Further, please note that also on the Master’s level, a course named “Technology and Innovation Management: Introduction” exists (and also a course called “Marketing”), but it is completely separate from the present course. Make sure you register for the correct course(s) via TUMonline.

Parallel course in Straubing: Please note that a course with the same title, content, and material and largely the same exam questions (apart from those about guest lectures, those may differ) will be taught at TUM Campus Straubing. Just the lecturers (Prof. Claudia Doblinger, Dr. Laura Stiller) and the guest speakers differ.

Scheduling: The course will be taught in person in lecture hall N1190, each Monday from 3:00 pm to 4:30 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 period will be from May 26th until June 30th; please check the official deadline. Please register for the exam titled “Campus Munich: Marketing and Innovation Management” (WI000820M). If you have already completed the Marketing or the Technology and Innovation Management course abroad and it has been recognized, you only need to take the individual exam (excluding Marketing or Technology and Innovation Management), please register for the exam titled “Technology and Innovation Management: Introduction” (WI000114) or „Marketing“ (WI000688). In addition, please be sure to send an e-mail to the grademanagement@mgt.tum.de stating that you are only take part and indicating which part.

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” (WI000820), 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	Organizing R&D and Innovation
M9	Individuals in R&D
M10	Selected Tools and their Applications
M11	Digitalization: New Technologies and Business Models

Guest speakers:

Thorsten Löwer, Managing Director, pro-beam

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 profits 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):

Compulsory readings: Strongly recommended for the exam.

- 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 persons 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.