## Course Descriptions Exchange 2023-2024

Strategic Management of Technology and Innovation Course Title

Course Code **ECTS Credits** 5.0

Whole/Half Grades Assessment

Period Period End Mon Tue Wed Thu Fri Start

4-9-2023 20-10-2023

Level no level

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Language of instruction

Goals This course aims to equip students with competencies related to strategic management of innovation, these

> (1) Holism: Making connections between different ideas, concepts and goals forms the heart of strategy, innovation, renewal, and entrepreneurship. This course exercises students' whole system thinking skills and

intellectual ability to make connections

(2) Co-creation: The defining quality of innovative systems is co-creation between research, business, governments, and the non-profit sector. Situations that require co-creation are often complex, uncertain and no two projects are alike. This course addresses such real-life business situations to co-create a novel point of view. Multidisciplinary teams will co-create and collaborate on concepts and ideas that will shape the future

of business in the fast-changing world of technology and innovation.
(3) Solution-oriented thinking: Academic education tends to focus on the craving for certainty and perfectionism. We run econometric tests to check for every assumption we make. While the routine to test every mental step we make is good about academics, it is also a pitfall. In real life, we work with what we have. Problems are there to be solved with all the available tools, both those from this course and from others, as well as from prior experience and tools from every student who joins in the exercise.

In other words, the main objective is that after having accomplished the course, students can go beyond the studied concepts. They should be able to translate the concepts and theories into real-life solutions in various contexts and situations, i.e., they should be able to generalize the learned material, extend their problem-solving skills, and prove creativity. Think "outside of the box" by building a bigger box to think inside of!

This is an introductory course to the management of innovation. It aims at introducing theories, models and tools to the students that are central to the strategic management of technological innovations. Core topics covered in this course include market failures faced by innovating firms, knowledge about the various definitions of an innovation and innovative activities, how to search for novel ideas (inside as well as outside of the firms' boundaries), what tools to use inside and outside of the firm to evaluate promising ideas efficiently and accurately, ways to acquire external financing in case of cash flow constraints, tools to use to increase appropriability of innovations as well as various forms to develop innovations inside and outside of the firm. In examples, cases, and assignments students work out in practice how to assess the feasibility and desirability of innovation opportunities and how to manage innovation from the first idea to implementing an innovation plan.

Schilling, M. A., & Shankar, R. (2019). Strategic management of technological innovation. McGraw-Hill

**Education** 

An advanced level of English. Prerequisites

Keywords

Literature

Description

Teaching methods PBL / Presentation / Assignment / Groupwork Participation / Written Exam / Presentation Assessment methods

Evaluation in previous academic

This course belongs to the following programme / specialisation

For the complete evaluation of this course please click http://iwiosbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM

Year 3 Elective Course(s) **Bachelor Business Engineering** SBE Exchange Bachelor **Bachelor Exchange Courses** SBE Exchange Master **Bachelor Exchange Courses**