Course syllabus

Innovationsmanagement
Innovation Management

INNN15, 7,5 credits, A (Second Cycle)

Valid for: 2023/24
Faculty: Faculty of Engineering, LTH
Decided by: PLED I
Date of Decision: 2023-04-14

General Information

Main field: Technology.
Elective for: C4, D4, E4, F4, I4-ai, M4, MD4, N4, Pi4
Language of instruction: The course will be given in English

Aim

The course Innovation Management aims (1) to provide students with fundamental knowledge of the phenomenon of innovation and innovation processes from the perspective of firms and organizations, (2) to enable students to use basic theoretical and practical tools to understand and handle real-world innovation processes; technology development and innovation strategy, such as strategies for product development (goods and services) and (3) to support students in developing a critical view on innovation, its role in society and impact on sustainability from an economic, environmental, and social perspective.It will offer an overview of available tools for supporting technology development and its related organizational structures.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- Demonstrate knowledge and insights into the management of innovation by working with a selected array of tools.
- Have an understanding of, and be able to apply and present, the most important tools for innovation management in different contexts.
- Show an understanding of innovation management techniques available to sustain innovation over time, while considering people, profit, and planet.

- Understand how innovation management functions in practice, as well as its advantages, inconveniences, and limitations.
- Show an understanding of the innovation management techniques to sustain innovation over time, its functioning in practice, and its advantages, inconveniences and limitations.
- Be able to relate different techniques to detected innovation-related problems in firms.

Competences and skills
For a passing grade the student must

• Compare the different available tools and decide upon the most adequate one according to the specific characteristics of the firm.
• Demonstrate the practical application of the tools in group-work based weekly assignments.
• Scan technological solutions and identify those options that fit best with regard to the firm's competencies and resources.
• Communicate the learning outcomes through presentations and leading the discussion.

Judgement and approach
For a passing grade the student must

• have the ability to independently analyze how contextual factors affect innovation activities in firms,
• have the ability to critically analyze the role of innovations in society.

Contents

Innovation is becoming increasingly complex. As global competition increases and product life and development cycles are shortened, firms need to maintain their technological leadership if they want to survive and grow over time. At the same time, firms a pressured to transition to more sustainable (economically, environmentally, and socially) practices.
Companies face challenges as they seek to manage innovation and translate technological, market related, economic, institutional and organizational opportunities into competitive advantage. In order to overcome such obstacles, the firm needs a solid understanding of the dynamic character of the innovation process and competence to analyze and understand its resource needs, and how to mobilize those resources.
Sustained innovation is only possible when the firm has a series of internal and external routines to scan the environment in search of technological opportunities, select those opportunities that are related to their technological competencies, obtain the resources to turn those opportunities into new products, market them and learn from the past.
The course provides students with a broad array of tools and concepts available to detect technological opportunities in the environment and manage the process of turning an idea into a new product.
The course will be very practical and students will work in groups with the different concepts/tools.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)
Assessment: The examination consists of three parts: 1) Project that will be performed in groups and reported in a written report and orally at seminars. 2) Active

particpation at case-seminars. Particpation at seminars is compulsory. Non-participation at seminars may require a written supplementary assignment. 3) Individual written report that discusses insights and conclusions from the project from a societal perspective for example from a sustainability and/or ethical perspective.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Assumed prior knowledge: MIO012/MIOA12/MIOA01/MIOA15 Managerial Economics. At least three years approved full time education at university level (or a Bachelor degree).
The number of participants is limited to: No
The course overlaps following course/s: INN001, INN010

Reading list

- Articles.
- John Bessant, Joe Tidd: Innovation and Entrepreneurship. Wiley, 2015, ISBN: 978-1-118-99309-5.

Contact and other information

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Course homepage: https://www.innovation.lth.se/education/