GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Innovation Management (F000892)

Course size *(nominal values; actual values may depend on programme)*

Credits 3.0 **Study time 90 h**

Course offerings and teaching methods in academic year 2025-2026

A (semester 2)	English	Gent	seminar group work lecture
B (semester 2)	Dutch	Gent	independent work
O (semester 2)	English	Gent	independent work

Lecturers in academic year 2025-2026

Verleye, Katrien	EB23	lecturer-in-charge

Offered in the following programmes in 2025-2026	crdts	offering
Master of Science in Teaching in Science and Technology(main subject Chemistry)	3	A
Master of Science in Teaching in Social Sciences(main subject Communication Science)	3	B
Bridging Programme Master of Science in Photonics Engineering	3	A
Master of Science in Chemistry(main subject (Bio)Organic and Polymer Chemistry)	3	A
Master of Science in Chemistry(main subject Analytical and Environmental Chemistry)	3	A
Master of Science in Complementary Studies in Business Economics(main subject Business Economics)	3	A
Master of Science in Communication Science(main subject Communication Management)	3	B
Master of Science in Business Engineering(main subject Data Analytics)	3	A
Master of Science in Business Engineering (Double Degree)(main subject Data Analytics)	3	A
Master of Science in Business Engineering (Double Degree)(main subject Finance)	3	A
Master of Science in Business Engineering(main subject Finance)	3	A
Master of Science in Industrial Engineering and Operations Research(main subject Manufacturing and Supply Chain Engineering)	3	A
Master of Science in Chemistry(main subject Materials and Nano Chemistry)	3	A
Master of Science in Communication Science(main subject New Media and Society)	3	A
Master of Science in Business Engineering (Double Degree)(main subject Operations Management)	3	A
Master of Science in Business Engineering(main subject Operations Management)	3	A
Master of Science in Industrial Engineering and Operations Research(main subject Transport and Mobility Engineering)	3	A
International Master of Science in Advanced Design of Sustainable Ships and Offshore Structures	3	A
Master of Science in Engineering: Ships and Marine Technology	3	A
Master of Science in Engineering: Ships and Marine Technology	3	A
Master of Science in Industrial Engineering and Operations Research	3	A
Master of Science in Photonics Engineering	3	B
Master of Science in Photonics Engineering	3	A
Exchange programme in Economics and Business Administration	3	A
Exchange Programme in Political and Social Sciences	3	A
Elective Set Business Economics	3	A

Teaching languages

English, Dutch

Keywords

Innovation management, technological innovation, green innovation, social innovation, design thinking, ecosystem perspective, circular economy

Position of the course

Innovation is for most entrepreneurs and companies in Europe the way to achieve enduring competitive advantage but innovation also allows these entrepreneurs and companies along with a wide range of other actors - such as social-profit organizations and governments - to tackle social and/or environmental issues. However, these economic, social, and/or environmental benefits can only be achieved when individuals and organizations are able to manage the innovation process in a thoughtful way. Following the growing importance of innovation at the national and international level, scholars from different disciplines - such as management, economics, sociology, engineering, ... - have tried to better understand the innovation process and provide insight into how individuals, organizations, and complex ecosystems can successfully manage innovation. This interdisciplinary nature of innovation as a subject, however, makes it an exceptionally attractive albeit complex subject to teach and understand. This course encourages students to balance and/or integrate different theoretical perspectives and practical tools, thereby evaluating their own potential as innovation managers.

Contents

- Innovation management at the system level with specific attention for systemic problems – such as economic recessions, climate change, and social inequality - and systemic instruments for managing transformative change such as the shift towards a circular economy
- Innovation management at the industry/sector level with specific attention for the emergence of technological, green and social innovations, patterns of innovation, standard battles, modularity and platform competition and timing of entry
- Innovation management at the company/organizational level with specific attention for choosing innovation projects, innovation protection, collaborative strategies, and business model innovation (incl. circular business models)
- Innovation management at the project level with specific attention for different ways of managing new product and service development processes (incl. design thinking) along with managing new product and service development teams and embedding these teams in the organization and implementing a deployment strategy

Initial competences

No prior knowledge required.

Final competences

1 understand the different theoretical frameworks and practical tools associated with innovation management and critically weigh and/or integrate them when analyzing recent and future innovations with an economic, social and/or ecological objective and their management
2 reflect upon recent and future innovations and the way in which innovation management contributes to the creation of economic, social and/or ecological value in interdisciplinary teams
3 report - whether or not with the help of digital information tools - about analyses and reflections about recent and future innovations and the way in which innovation management contributes to the creation of economic, social and/or ecological value in a structured, scientific, and engaging way
4 formulate a personal viewpoint with regard to recent and future innovations with an economic, social and/or ecological objective and theoretical frameworks and practical tools related to managing these innovations
5 critically reflect upon one's own innovation management thinking and competences to manage innovation, so that economic, social and/or ecological value is created.

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned

in 'Starting Competences'

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Group work, Seminar, Lecture, Independent work

Extra information on the teaching methods

After introducing different theoretical frameworks and practical tools associated with innovation management via lectures - online or not - and self-study, students are invited to the "special sessions", i.e., seminars (whether or not online) with coached exercises and/or online discussions. These special sessions go along with a group assignment and/or individual assignment upon which results - whether or not with the help of digital information sources - in a written and/or oral report.

Study material

Type: Handbook

Name: Strategic Management of Technological Innovation
Indicative price: € 55
Optional: yes
Author : Melissa Schilling
ISBN : 126408093X
Alternative : any of the previous editions
Online Available : Yes
Available in the Library : Yes
Available through Student Association : Yes
Usability and Lifetime within the Course Unit : regularly
Usability and Lifetime within the Study Programme : one-time
Usability and Lifetime after the Study Programme : not

Type: Slides

Name: Online presentations lectures and special sessions
Indicative price: Free or paid by faculty
Optional: no
Language : English
Number of Slides : 300
Available on Ufora : Yes
Online Available : No
Available in the Library : No
Available through Student Association : No
Additional information: Students can choose to print slides (not necessary), which comes with an extra cost.

Type: Reader

Name: Online book chapters and articles from scientific journals
Indicative price: Free or paid by faculty
Optional: no
Language : English
Number of Pages : 200
Available on Ufora : Yes
Online Available : Yes
Available in the Library : No
Available through Student Association : No
Additional information: Students can choose to print online bookchapters and journal articles (not necessary), which comes with an extra cost.

References

- Melissa Schilling Strategic Management of Technological Innovation, McGraw-Hill International Seventh Edition, 2023
- Paul Trott Innovation Management and New Product Development.Prentice Hall FT Fifth Edition 2012
- Henry Chesbrough Open Services Innovation Jossey-Bass 2011

Course content-related study coaching

The lecturer is available to answer questions before, during, and after each lecture and/or special session. Additionally, students also get feedback from one another

and/or the lecturer during the special sessions. The lecture also shares feedback about individual and group reports resulting the special sessions via rubrics in Ufora, thereby allowing students to gain insight into the extent to which the learning objectives are achieved.

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment with open-ended questions

Examination methods in case of periodic assessment during the second examination period

Oral assessment

Examination methods in case of permanent assessment

Participation, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Extra information on the examination methods

The permanent evaluation consists of an evaluation of the participation during coached exercises and/or online discussions in combination with reports associated with the individual and group assignments.
The end-of-term evaluation consists of a written exam with open questions

Calculation of the examination mark

Permanent evaluation (25%), end-of-term evaluation (75%).
To pass a student needs to take part in all forms of evaluation - permanent and the end-of-term evaluation. If students choose not to participate in the assessment of one or more components, or if they obtain less than 10/20 for at least one of the components, passing the course unit as a whole is no longer possible. If the total score does turn out to be a mark of 10 or more out of twenty, this is reduced to the highest fail mark (9/20)

Facilities for Working Students

Working students can complete the lectures - just like other students - in their own chosen manner, i.e., on-campus or online. There are specific guidelines for the special sessions that are detailed via Ufora at the start of the semester and this information forms part of the study sheet.