

**Module Description**

# Novel Innovation and Design Principles

**General Information**
**Number of ECTS Credits**

3

**Abbreviation**

TSM\_InnoDes

**Version**

07.03.2016

**Responsible of module**

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**Language**

	Lausanne	Bern	Zurich
Instruction	<input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input checked="" type="checkbox"/> E
Documentation	<input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input checked="" type="checkbox"/> E
Examination	<input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> D <input checked="" type="checkbox"/> E

**Module category**

- Fundamental theoretical principles - FTP
- Technical/scientific specialization module - TSM
- Context module - CM

**Lessons**

- 2 lecture periods and 1 tutorial period per week
- 2 lecture periods per week

**Brief course description of module objectives and content**

**NOVEL INNOVATION & DESIGN PRINCIPLES.** In order to keep generating competitive advantage through innovation, both manufacturing and service industries are in need to apply novel innovation and design principles. This module will focus on reuniting the study and practice of entrepreneurship and innovation. It takes a process-oriented view of innovation and starts with setting entrepreneurial goals and context, recognizing major opportunities, finding the resources, developing ventures and eventually discusses how value is created in the process. Alongside this journey, approaches such as design thinking, user-driven innovation, expert design principles, co-design, product & process innovation, open innovation, lean entrepreneurship, corporate venturing, jugaad innovation, social and sustainability innovation and business model innovation, among others, will be used to work on 6 real-life business cases. Themes such as digitalization, mass-customization and use of novel tools will be applied.

**Aims, content, methods**
**Learning objectives and acquired competencies**

- What innovation and entrepreneurship mean – and how they are essential for survival and growth
- Innovation as a process rather than a single flash of inspiration
- The nature of creativity and the creative process
- Where innovations come from – the wide range of different source which offer opportunities
- The idea of push and pull forces and their interactions
- The need for a strategy to guide search for opportunities
- Developing and using a business plan to attract resources
- How networking helps the process of innovation through improving the range and scale of knowledge interaction
- How different networks can be designed and operated
- Formal processes of product development
- Contextual factors and the process of creating an innovative new venture
- Advantages and disadvantages of different structures for corporate ventures
- Social Entrepreneurship and Social Innovation
- Challenges and Opportunities offered by emerging markets, meeting needs of the “bottom of the pyramid”
- Different types of Innovation which can contribute to improved sustainability

**Contents of module with emphasis on teaching content**

WK1	WK2	WK3	WK4	WK5	WK6	WK7
The Innovation Imperative	Entrepreneurial Creativity	Entrepreneurial Creativity (+ Leadership)	Sources of Innovation	EXCURSION	Search Strategies for Innovation	Building the Case
AB	AB	AB	AB	AB	AB	AB
Case 1	Group work	Case 2	Group work	Group work	Case 3	Group work

WK8	WK9	WK10	WK11	WK12	WK13	WK14
Exploiting Networks	Developing New Products and Services	Creating New Ventures, Corporate Venturing	Social Innovation	Innovation, Globalization and Development	Sustainability-led Innovation	Wrap-up Megatrends Pitching
ML	ML	ML	ML	ML	ML	ML
Case 4	Group work	Case 5	Group work	Case 6	Group work	Elevator Pitches

**Teaching and learning methods**

Flipped Classroom didactic approach complemented by case studies, excursions, workshops and frontal teaching. Units of 2x45min and 1x45 min case study. Cases are briefed and presented biweekly.

**Prerequisites, previous knowledge, entrance competencies**

BSc Business Engineering.

Other with basic knowledge of business principles such as marketing, accounting and controlling

**Literature**

Innovation & Entrepreneurship. John Bessant and Joe Tidd. 2015, 3. Ed., Wiley

**Assessment**
**Certification requirements for final examinations (conditions for attestation)**

All case studies handed in, at least one case personally presented

**Written module examination**

Duration of exam: 120 minutes

Permissible aids: Summary (2 pages A4)