



Faculty of Arts and Social Sciences  
Business Administration

## Syllabus

### Innovation management and industrial transformation

<b>Course Code:</b>	IEAD11
<b>Course Title:</b>	Innovation management and industrial transformation <i>Innovationsledning och industriell transformation</i>
<b>Credits:</b>	15
<b>Degree Level:</b>	Master's level
<b>Progressive Specialisation:</b>	Second cycle, has only first-cycle course/s as entry requirements (A1N)

**Major Field of Study:**  
IEA (Industrial Management)

#### Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2025-03-03, and is valid from the Autumn semester 2025 at Karlstad University.

#### Prerequisites

A Bachelor degree of at least 180 ECTS credits in Industrial Engineering and Management or other Technology specialisation as the main area of study, or 105 ECTS credits completed from semesters 1-4 and 22.5 ECTS credits completed from semester 5 in the Master programme in Industrial Engineering and Management (TACIE), or equivalent.

#### Learning Outcomes

Upon completion of the course, students should be able to:

1. give an account of and discuss theories, concepts, strategies, models, and perspectives of innovation with a special emphasis on industrial transformation, innovation management in organisations, and the management of uncertainty,
2. assess and reflect critically upon challenges of organising innovation in different contexts, with support from relevant theories,
3. analyse business environments and apply relevant strategies and tools for innovation and business management, and for managing complex problems involving a great deal of uncertainty, and
4. reflect critically upon and assess theories, strategies, and tools used in industrial transformation and innovation management, and relate them to aspects of uncertainty.

#### Content

The aim of the course is for students to acquire an understanding of transformation processes in industry and society and approaches to innovation management, and to develop an ability to manage complex and unpredictable challenges.

The course introduces theoretical frameworks and approaches essential for understanding innovation and its role in industrial transformation. It provides an overview of models relevant for managing innovation efforts in a dynamic and uncertain environment. The course consists of three modules: (i) Industrial Transformation, (ii) Innovation Management, and (iii) Managing Uncertainty.

The Industrial Transformation module addresses various perspectives on industrial change, innovation diffusion, and business dynamics. The Innovation Management module covers key concepts and aspects related to innovation processes, organising innovation activities, and the relationship between innovation, business, and sustainability. The Managing Uncertainty module deals with different approaches and tools for navigating complexity and uncertainty in relation to design theory. Both scientific methods and social science perspectives are included.

**Reading List**

See separate document.

**Examination**

Assessment is based on written and oral assignments, completed individually and in groups and presented and discussed in seminars. Submissions for assessment must clearly indicate individual contributions.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

**Grades**

One of the grades 5 (Pass with Distinction), 4 (Pass with Some Distinction), 3 (Pass), or U (Fail) is awarded in the examination of the course.

**Quality Assurance**

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

**Course Certificate**

A course certificate will be provided upon request.

**Additional information**

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.