



Faculty of Arts and Social Sciences

Programme Syllabus

Reg.no. HS 2023/48

Master Programme in Innovation and Service Development

Programme Code:	SAIND
Programme Title:	Master Programme in Innovation and Service Development Masterprogram i innovation och tjänsteutveckling
Credits:	120
Programme Approval:	The programme syllabus was approved by the Faculty Board of Arts and Social Science on 9 February 2023, and applies as of the autumn semester of 2023.
Language of Instruction:	English
Degree Level:	Second
Degree Type:	General
Entry requirements	Degree of Bachelor of at least 180 credits, including a degree project of at least 15 credits or equivalent. The degree shall also include 22.5 credits in Mathematics and 15 credits in Industrial Organisation, Project Management or equivalent. Furthermore, 7.5 credits in Production Systems or Manufacturing Technology, as well as 7.5 credits in Mechanics or Solid Mechanics are required. Upper secondary level English 6 or equivalent.

General Information

The Master Programme in Innovation and Service Development comprises two years of full-time study and leads to a Degree of Master in Industrial Management. The Master Programme is focused on two main subject areas: innovation management and governance, and services and service development.

The programme offers students the opportunity to build on their first-cycle qualification, primarily in the discipline of Engineering. In addition, the degree programme has a strong connection to research and education in service management and innovation at Karlstad University.

Programme Outcomes

For programme completion, students must meet the national requirements for a Master's Degree as well as the specific local programme requirement.

National outcomes

Knowledge and understanding

For a Degree of Master (120 credits) the student shall

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate deepened methodological knowledge in the main field of study.

Competence and skills

For a Degree of Master (120 credits) the student shall

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information,
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work,
- demonstrate the ability in speech and writing both nationally and internationally to clearly report and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgement and approach

For a Degree of Master (120 credits) the student shall

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work,
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the need for further knowledge and take responsibility for his or her ongoing learning.

Independent project (degree project)

A requirement for the award of a Degree of Master (120 credits) is completion by the student of an independent project (degree project) for at least 30 credits in the main field of study. The degree project may comprise less than 30 credits, however no less than 15 credits, if the student has already completed an independent project in the second cycle for at least 15 credits in the main field of study or the equivalent from a programme of study outside Sweden.

Local outcome

For a Degree of Master (120 credits) the student shall

- demonstrate the ability to apply and understand the interplay between services, innovation, and business creation in order to solve practical problems.

Programme Structure

The programme is a two-year Master Programme in Industrial Engineering and Management focused on innovation management and governance, and services and service development. The programme comprises ten individual courses and one degree project.

The programme is organised in eight units (four each year), in which students take two courses in parallel. The first unit is focused on industry and business transformation, and students are introduced to the basic challenges of technology development and innovation governance. Units 2-4

focus on services and servitisation, sales and entrepreneurship, and digitalisation. Units 5 and 6 include a project course with a special focus on sustainable development, and a methods course. Finally, units 7-8 are focused on research through an independent project. The perspectives of sustainability and gender equality permeate the entire degree programme, with the former being a natural part of the final project work and the independent degree project. The gender equality perspective is continuously considered in relation to the subject area, especially in relation to entrepreneurship and organisational issues, but also in terms of the structure and approach of the programme in relation to seminars and group and project work.

In general, the overall setup of the courses is that students develop the competence and skills described in the programme outcomes through independent assignments. In addition to lectures and exercises, teaching mainly consists of seminars based on written and oral presentations. The programme is also characterised by collaboration with the larger community through guest lectures and other contributions from companies and public agencies.

Course outcomes and content are described in the respective course syllabus.

Programme Curriculum

The degree programme includes the following:

Semester 1

Industrial Transformation, 7.5 credits
 Innovation Management, 7.5 credits
 Service Management for Engineers, 7.5 credits
 Sales Management, 7.5 credits

Semester 2

Idea Management at the Front End of Innovation, 7.5 credits
 Entrepreneurship, 7.5 credits
 Servitisation for Engineers, 7.5 credits
 Digitalisation, 7.5 credits

Semester 3

Sustainable Product and Business Development, 15 credits
 Research Methods in Industrial Engineering and Management, 15 credits

Semester 4

Industrial Management - degree project, 30 credits

Degree Title

For Master's students who have completed a Degree of Bachelor of Science, the programme leads to:
 Degree of Master of Science (120 credits)
 Main field of study: Industrial Management

For Master's students who have completed a Degree of Bachelor of Arts, the programme leads to:
 Degree of Master of Arts (120 credits)
 Main field of study: Industrial Management

Credit Transfer

According to the Higher Education Ordinance Ch. 6 Sec. 6–8 students have the right to transfer credits and have prior learning recognised upon approval.

Additional Information

The local regulations for first and second cycle education at Karlstad University stipulate the obligations and rights of students and staff.

Previous versions of the programme syllabus have been approved:

5 December 2019, reg.no HS 2019/1114, effective from the autumn semester of 2020

13 May 2020, reg.no HS 2020/671, effective from the autumn semester of 2021