



Faculty of Economy, Communication and IT

Programme Study Plan

Master's Level Education in Industrial Management

Programme Code	SAIEK
Programme Title:	Master Programme in Industrial Management
Credits/ECTS:	120
Programme Approval	The Programme Study Plan was approved by the Faculty Board for Economy, Communication and IT on 4 December 2008 and is valid from the autumn semester of 2009 at Karlstad University.
Language of Instruction:	English
Degree Level:	Master
Degree Type:	General
Prerequisites	Bachelor's Degree of 180 ECTS credits with a technological or natural science major. Upper Secondary English course B or equivalent

Introduction

An industrial management education based on technology or natural science studies provides the knowledge required to manage and lead technology-based operations. The programme is designed to equip students for leading positions in projects or companies involved in business or product development, industrial marketing or production planning.

Aims and Learning Outcomes

Knowledge and understanding

To earn a Master's degree (two years), students should be able to demonstrate

- knowledge and understanding of the field industrial management, including a broad command of the field and deeper knowledge of selected areas, together with insight into current research and development,
- deeper knowledge of method in industrial management, and
- the ability to contribute to a sustainable development.

Skills and abilities

To earn a Master's degree (two years), students should be able to demonstrate

- the ability to integrate knowledge of technology/natural science and economy critically and systematically, and to analyse, assess and deal with complex economic phenomena, problems and situations, even when having access only to a limited amount of background information,
- the ability to identify and formulate economic issues critically, independently and creatively, and the ability to plan and carry out qualified tasks applying adequate methods within a given deadline so as to contribute to the development of knowledge and to evaluate the work,
- the ability to communicate and interact with various groups, nationally and internationally, in presenting and discussing information and conclusions both orally and in writing,
- the skills required to take active part in industrial research and development or to work individually or in a team in other qualified areas, and
- the ability to use systematic project management methodology to plan, carry out and evaluate major and minor projects.

Attitude and assessment abilities

To earn a Master's degree (two years), students should be able to demonstrate

- the ability to make appropriate judgements in the field of industrial management with respect to relevant scientific, societal and ethical aspects, and an awareness of ethical issues in research and development,
- insight into the possibilities and limitations of scientific research, the role of science in society, and our responsibility for its use, and
- the ability to identify their own need for further knowledge and training.

Programme Structure

The programme comprises four terms of study. The independent degree project is normally carried out in the last term, but students are allowed to start the project in the third term for the opportunity to choose courses offered throughout the academic year. The first two terms are designed to generally introduce students to the economic issues and methods of analysis relevant to industrial work requiring technological/natural science knowledge. Students work together on projects in every course and develop

their presentation skills orally and in writing. In terms 3 and 4, students create their own degree by choosing courses and research topic for their degree project, and they can also choose to study abroad.

Programme Curriculum

Terms 1-2: The aim of the first two terms is that students acquire the knowledge of essential issues and methods of analysis required to manage and control an industrial company. The courses are mandatory.

Term 1: Industrial Financial Analysis, 30 ECTS cr.

- Financial and Management Accounting, 6 ECTS cr.
- Corporate Finance, 6 ECTS cr.
- Operations Management, 6 ECTS cr.
- Logistics, 6 ECTS cr.
- Environmental Economy, 6 ECTS cr.

Term 2: Industrial Marketing and Organisation, 30 ECTS cr.

- Industrial Marketing, 6 ECTS cr.
- Quality Management, 6 ECTS cr.
- Competence and Management, 6 ECTS cr.
- Innovation and Entrepreneurship, 6 ECTS cr.
- Project Management, 6 ECTS cr.

Term 3: Electives courses totalling 30 ECTS cr. Students are encouraged to study abroad. Students who want to obtain eligibility for doctoral studies in Business Administration at Karlstad University must choose courses that provide advanced knowledge in the field of industrial management. At Karlstad University such courses are mainly offered as master-level courses in business administration. Students who plan to enrol in the doctoral programme are advised to consult their director of studies.

Term 4: Degree Project, 30 ECTS cr.

Degree

Degree of Master of Science (Two Years)

Major: Industrial Management

Transfer of Credits

Students have the right to transfer credits from other universities in Sweden or abroad. The recognition of previous education as credit for part of a course is subject to approval by the examiner. The recognition of previous education as credit for an entire course is subject to approval by the Student Centre.

Additional Information

Local regulations for the Bachelor's and Master's level at Karlstad University stipulate the rights and obligations of staff and students.