



HÖGSKOLAN I GÄVLE

Study Programme in Industrial Management and Logistics 180

cr

Industriell ekonomi - Industrial Management and Logistics 180 hp

Set by -

Version

| Set at | Valid from |
|----------|-------------|
| 12/18/12 | ST12 |
| 10/28/14 | HT14 |
| 12/21/17 | HT18 |
| 6/27/19 | HT19 |
| 2/4/20 | HT20 |
| 1/29/21 | HT21 |

| | |
|------------------------|--------------|
| Education level | First cycle |
| Programme code | TGINK |
| Credits | 180 cr |
| Diary number | HIG 2012/865 |

Programmespecific objectives

After the education, the student should have knowledge and skills in both the technical and economical fields, for activities mainly within fields outside the industry:

- Logistics
- Total quality management
- Industrial organisation
- Industrial environmental economics

The education should be of high standard and higher education qualification should be attractive also on the international market.

Knowledge and Understanding

For a bachelor's degree, the student should

- demonstrate knowledge within the fields of industrial environmental economics,
- industrial organisation, total quality management and logistics, and understand how the different fields within industrial management interact with each another

- demonstrate knowledge of statistics
- be able to utilise modern information technology
- be able to define and explain central concepts concerning project work and project management, and be able to account for different roles in a project group
- understand the relationship between planning, organisation and follow-up of a project
- interact with other members of a project group and actively contribute to the work of the group, and understand the different stages of the process in a project and how these interact over time

Skills and Abilities

For a bachelor's degree, the student should

- be able to present results orally and in writing
- demonstrate knowledge of business administration theory regarding investment and cost calculation, and financial business analysis
- demonstrate the ability to apply the economic and technical knowledge in connection with exercises, project work and degree projects, where environmental aspects should also be observed
- demonstrate the ability to methodologically identify and solve problems through extensive information collection, analysis, design of alternative solutions, evaluation and implementation, and
- be able to plan a project based on given specifications
- demonstrate the ability to make assessments of the suitability of different tools for control and quality assurance of projects
- in the capacity of project manager, delegate the responsibility to the other project members, and be able to discover and handle potential conflicts in a project group
- be aware of the importance of the different roles in a project group
- demonstrate the ability to assess the status of a project and its possibility of target achievement
- observe the dynamics of the group and act when problems arise

Judgement and Approach

For a bachelor's degree, the student should

- demonstrate the ability to formulate search questions and retrieve information from relevant sources
- demonstrate the ability to interpret and write references
- be able to account for the difference between academic material and other types of material
- be able to follow the knowledge development in the own subject area
- be familiar with the forms of academic communication and publication
- demonstrate the ability to review, analyse and evaluate both the search process and the search results
- demonstrate the ability to present criteria for evaluation of sources of information and application of these.

Target

A Degree of Bachelor of Arts/Science is awarded after the student has completed the courses required to gain 180 credits in a defined specialisation determined by each higher education institution itself, of which 90 credits are for progressively specialised study in the principal field (main field of study) of the programme.

Knowledge and understanding

For a Degree of Bachelor of Arts/Science the student shall

- demonstrate knowledge and understanding in the main field of study, including knowledge of the disciplinary foundation of the field, understanding of applicable methodologies in the field, specialised study in some aspect of the field as well as awareness of current research issues.

Skills and abilities

For a Degree of Bachelor of Arts/Science the student shall

- demonstrate the ability to search for, gather, evaluate and critically interpret the relevant information for a formulated problem and also discuss phenomena, issues and situations critically
- demonstrate the ability to identify, formulate and solve problems autonomously and to complete tasks within predetermined time frames
- demonstrate the ability to present and discuss information, problems and solutions in speech and writing and in dialogue with different audiences, and

| | |
|--------------------------------|--|
| Judgement and attitudes | <ul style="list-style-type: none"> • demonstrate the skills required to work autonomously in the main field of study. <p>For a Degree of Bachelor of Arts/Science the student shall</p> <ul style="list-style-type: none"> • demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues • demonstrate insight into the role of knowledge 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 ongoing learning. |
| Content and structure | <p>Within the programme, industrial economy constitutes the main field of study. During the initial semester of year one, the course Industrial Business Development is included, in which basic concepts in the main field of study are studied. The studies within the main field continue during semester two, with four basic courses which cover every field of industrial management. Year two includes advanced courses in industrial management. In the courses Manufacturing Logistics and Business Logistics - Physical Distribution, a company's organisation for efficient management and control and examples of different companies' logistics solutions are studied. The third year includes advanced studies in total quality management and simulation. Semester five includes a project course in Management Systems. The courses Innovation Management and Logistics and Supply Chain Management focus on business management and provide the knowledge needed for the final degree project.</p> <p>The programme ends with a degree project. The degree project is carried out in concentrated form at the end of the education. Through the degree project, knowledge acquired during previous studies should be applied, broadened and advanced. Through the degree project, the student should show that the learning outcomes for first-cycle programmes stated in the Higher Education Act, the learning outcomes stated in the Higher Education Ordinance and the specific learning outcomes stated in this programme syllabus have been achieved.</p> |
| Other degree | <p>A requirement for the award of a Degree of Bachelor of Arts/Science is completion by the student of an independent project (degree project) for at least 15 credits in the main field of study.</p> <p>Miscellaneous</p> <p>Specific requirements determined by each higher education institution itself within the parameters of the requirements laid down in this qualification descriptor shall also apply for a Degree of Bachelor of Arts/Science with a defined specialisation.</p> |
| Degree title | Degree of Bachelor of Arts/Science/ Social Science |
| Prerequisites | <p>General entry requirements for higher education in Sweden and courses corresponding to the following Swedish Upper Secondary School courses:</p> <ul style="list-style-type: none"> - Mathematics 3b or 3c or Mathematics C - Social studies 1 b or 1a1+1a2 - English 6 |
| Other | <p>Students admitted to the early years of the Study Programme in Industrial Management and Logistics, follow the programme syllabus for that year.</p> <p>For students admitted to the later part of the programme, and for students who have had approved leave from studies, a specific study plan is established by the faculty programme director in consultation with study advisers.</p> |

Year 1

| Period | Identifier | Title | Level | Credits | Field |
|--------|------------|-------------------------------|-------|---------|-------------------------|
| 1:1 | FEG120 | <i>Financial Accounting A</i> | G1N | 7.5 cr | Business Administration |
| 1:1 | IO710A | <i>Industrial Management</i> | G1N | 7.5 cr | Industrial |

| | | | | | |
|-----|--------|---|-----|--------|-------------------------|
| | | | | | Economics |
| 1:2 | IM710A | <i>Work Science and Environmental Technology</i> | G1N | 7.5 cr | Industrial Economics |
| 1:2 | IE723A | <i>Introduction to project methodology in industrial management</i> | G1N | 7.5 cr | Industrial Economics |
| 1:3 | ST001A | <i>Data Analysis and Statistics I</i> | G1N | 7.5 cr | Not defined |
| 1:3 | LO710A | <i>Fundamentals of Logistics</i> | G1N | 7.5 cr | Industrial Economics |
| 1:4 | FEG130 | <i>Management Accounting A</i> | G1N | 7.5 cr | Business Administration |
| 1:4 | KS710A | <i>Total Quality Management and Technology</i> | G1N | 7.5 cr | Industrial Economics |

Year 2

| Period | Identifier | Title | Level | Credits | Field |
|--------|------------|--|-------|---------|-------------------------|
| 2:1 | IEG310 | <i>Manufacturing Logistics</i> | G1F | 7.5 cr | Industrial Economics |
| 2:1 | IM726B | <i>Industrial environmental management</i> | G1F | 7.5 cr | Industrial Economics |
| 2:2 | FEG140 | <i>Marketing A</i> | G1N | 7.5 cr | Business Administration |
| 2:2 | IEG100 | <i>Basic of purchasing</i> | G1N | 7.5 cr | Industrial Economics |
| 2:3 | IEG309 | <i>Operations Strategy</i> | G1F | 7.5 cr | Industrial Economics |
| 2:3 | KS720B | <i>Management and Control of Quality</i> | G1F | 7.5 cr | Industrial Economics |
| 2:4 | FEG240 | <i>Marketing B</i> | G1F | 7.5 cr | Business Administration |
| 2:4 | DVG013 | <i>Using Excel for Business Support</i> | G1N | 7.5 cr | Computer Science |

Year 3

| Period | Identifier | Title | Level | Credits | Field |
|--------|------------|--|-------|---------|----------------------|
| 3:1 | IEG504 | <i>Management Systems for Quality and Business Development</i> | G2F | 7.5 cr | Industrial Economics |

| | | | | | |
|------------|--------|--|-----|--------|--|
| 3:1 | IEG304 | <i>Environmental Economics and Management</i> | G1F | 7.5 cr | Industrial Economics, Environmental Engineering |
| 3:2 | IEG306 | <i>Simulation Technique in Logistics</i> | G1F | 7.5 cr | Industrial Economics |
| 3:2 | IEG801 | <i>Innovation Management</i> | G2F | 7.5 cr | Industrial Economics |
| 3:2 | IEG503 | <i>Lean and Leadership</i> | G2F | 7.5 cr | Industrial Economics |
| 3:3 | TMG500 | <i>Scientific Theory and Writing</i> | G2F | 7.5 cr | Spatial Planning, Industrial Economics, Electronics, Geomatics, Building Engineering, Computer Science, Applied Geographical Information Technology, Geography, Energy Systems, Mechanical Engineering, Surveying Technology |
| 3:3 | LO733C | <i>Logistics and supply chain management</i> | G1F | 7.5 cr | Industrial Economics |
| 3:4 | IEG800 | <i>Degree Project in Industrial engineering and management</i> | G2E | 15 cr | Industrial Economics |