HÖGSKOLAN I BORÅS

BSc in Industrial Engineering - International Business Engineering
Industriell ekonomi - internationell affärsingenjör
180 credits

Ladok Code: KININ
Version: 5.3
Level: First cycle
Approved by: Education Committee 2014-05-26
Valid from: Autumn 2013
Valid for:

General Objectives

First level education shall develop the students'

- ability to make independent and critical assessments,
- ability to independently perceive, formulate and solve problems, and
- preparedness to deal with change in working life.

In the educational field concerned, in addition to knowledge and skills, students shall develop an ability to

- seek and evaluate knowledge at a scholarly level,
- follow the development of knowledge, and
- exchange knowledge with other people, including people without specialist knowledge of the field

(The Higher Educations Act, Chapter 1, Section 8)

Objectives

A Degree of Bachelor is obtained after the student has completed course requirements of 180 higher education credits with a certain area of specialisation determined by each higher education institution itself, including at least 90 higher education credits with increasingly in-depth studies in the main field of study.

Knowledge and understanding

- demonstrate knowledge and understanding in their main field of study, including knowledge of the scientific basis of the field, knowledge of applicable methods in the field, in-depth knowledge of some part of the field and a general sense of current research issues.

Skills and abilities

For a Degree of Bachelor students must

- demonstrate an ability to seek, gather and critically interpret information that is relevant to a problem and to critically discuss phenomena, issues and situations
- demonstrate an ability to independently identify, formulate and solve problems and to perform tasks within specified time limits
- demonstrate an ability to present and discuss information, problems and solutions in dialogue with different groups, orally and in writing
- demonstrate the skills required to work independently in the field that the education concerns.

Judgement and approach

For a Degree of Bachelor students must

- demonstrate an ability to make assessments in their main field of study, taking into account relevant scientific, social and ethical aspects
- demonstrate insight into the role of knowledge in society and into peoples responsibility for how knowledge is used and

- demonstrate an ability to identify their need of further knowledge and to upgrade their capabilities.

Independent project (degree project)

For a Degree of Bachelor students must have completed an independent project (degree project) worth at least 15 higher education credits in their main field of study, within the framework of the course requirements.

Other

For a Degree of Bachelor with a certain area of specialisation more precise requirements are also to apply, as determined by each higher education institution itself within the framework of the requirements in this qualification description.

Programme Objectives

After completing the programme the student shall:

- possess knowledge about the various functions and activities of a company which is important in order to be able to work effectively as an industrial engineer as well as an engineer within other organisations
- have knowledge of the various control systems of a company, such as quality, environmental and financial systems
- be well educated in the areas of project management and industrial engineering while being thoroughly aware of organization and leadership on a theoretical level
- have demonstrated the ability to perform engineering work in an international business environment
- be able to participate in and lead projects that include cost estimation and budgeting
- have acquired a holistic approach to business activities and industrial operations
- be able to use operations research theoretically to design man/information/machine systems and improve their efficiency
- have knowledge about how business is managed internationally and specifically how purchasing of products/services is carried out internationally
- have knowledge about how processes and flow can be optimised.

The study programme is intended to provide the student with good opportunity to help small, medium and large businesses to evolve, mostly regarding productivity, quality and logistics.

Content

The following courses are included in the programme:

The courses comprise 7,5 ECTS credits if nothing else is stated.

Year 1

- Introduction to Industrial Engineering
- Linear Algebra
- Quality and Management Systems
- Calculus
- Industrial Business Economics I
- Engineering Statistics
- Applied Calculus
- Statistical Quality Control

Year 2

- Project Management
- Project Work in Quality Technology
- International Production Engineering
- Operations Research
- Logistics - Tools and Methods (LOG 1)
- Change Management and Psychology
- Industrial Business Economics 2
- Logistics for World Trade

Year 3

- Industrial Business Economics 3
- Materials and Production Management Management
- Logistics II

- Design of Experiment
- Advanced Logistics
- Manufacturing Simulation
- BSc Degree Thesis, 15 ECTS credits

Minor changes of the order and the extent of some courses indicated above may occur.

Admission Requirements

General entry requirements + Mathematics 3b / 3c. Or: English B, Mathematics C. (From basic eligibility there is an exemption from Swedish language)

For this programme we accept:

- IELTS (academic modules) with an overall mark of 6.0 and no section below 5.0
- TOEFL (paper based): Score of 4.0 (scale 1-6) in written test, total score of 550
- TOEFL (Internet based): Score of 17 (scale 0-30) in written test, total score of 79

Please note: TOEFL Examinee Score Records are not accepted

For further information about English language proficiency, please http://www.hb.se/en/International-student/Bachelor--Master-student/Application--Admission/Admission-process/English-language-proficiency/

Degree

Degree of Bachelor of Science with a major in Industrial Engineering - specialisation International Business Engineering.

Degree certificates are issued upon application in Ladok for students. More information is available at www.hb.se.

Student Influence and Evaluation

Student Influence and Evaluation: Every course in the programme is evaluated (see the University College's policy on course evaluation). The head of the programme is responsible for regularly and in a systematic fashion collecting the student's opinions on the education. The head of the programme, along with the prefect, is also responsible for evaluating the whole programme on a yearly basis. The evaluation is carried out in cooperation with the programme's teacher, the students and professional representatives. The evaluation is documented in writing and brought back to the students.

Miscellaneous

Language of instruction: English.

The language of instruction is English.