



Programme syllabus

Bachelor's Programme in Business Engineering Kandidatprogram, affärssystem *180.0 credits*

Valid for students admitted to the education from autumn 09 (HT - Autumn term; VT - Spring term).

This is a translation of the Swedish, legally binding, programme syllabus.

Programme objectives

The overall objective of the program is for the students, after completed education, to have acquired the necessary knowledge and skills for independent work as information system developer or consultant, particularly in the area of business information systems, enterprise resource planning systems, and financial information systems. The students should also have developed the ability to critically think and reflect, including on related scientific knowledge and practical experience in the area of the study program.

Knowledge and understanding

After completed education the students are expected:

- have knowledge and understanding of the main area of the studies
- to have knowledge of relevant methods, tools and approaches in the area of information systems supporting various functions of an organization e.g. business planning, management and finance.
- to have knowledge of the scientific foundations of the area of information system engineering, as well as have knowledge of useful research approaches in this area.
- to have reached a more in-depth knowledge in a certain area according to the course selections done in the final year of the program.

Skills and abilities

After completed education the students are expected:

- to be able to search, collect, assess and critically analyze relevant information pertinent to a problem definition in an organization, as well as critically assess phenomena and challenges in the area of the study program.
- to be able to independently identify, formulate, and solve problems as well as to perform tasks within given deadlines.
- to have an understanding of the advisory role of consultants

- to be able to work in team accomplishing a task within a given timeframe.
- to be able to reflect and discuss information, problems, challenges and solutions in a dialog with various kinds of stakeholders

Ability to make judgements and adopt a standpoint

After completed educations the students are expected:

- to be able to make decisions with respect to the scientific, societal and ethical aspects of the main area of studies.
- to understand the IT consultant's roles in the society and the responsibility for how information systems are used
- to be able to identify his/her needs for additional knowledge and to be able to continuously develop his/her competence.

In addition the following general goals of the education program are:

- to provide an academic background within the relevant study area that allows continuation of studies to the Master of Science level.
- to develop students' ability to search and assess knowledge in the area based on scientific grounds.
- to provide additional oral and written presentation skills.

Extent and content of the programme

Business Engineering is a Bachelor of Science program (3 years, 180 credits). Its main objective is to educate information system developers and IT consultants to be working in the area of information systems for management, planning, finance, as well as other systems supporting diverse organizational functions. The first two years of education consists of obligatory courses. During the third year in addition to a few mandatory courses, the students have to possibility to choose among a large group of elective courses according to their interests. Majority of the courses are given in Swedish.

Eligibility and selection

The Higher Education Ordinance defined the basic eligibility criteria. To be admitted to KTH the basic criteria as well as specific criteria should be met. Swedish National Agency for Higher Education has defined which requirements apply to study programs at KTH (see HSVFS 1996:21). KTH has also decided on additional criteria. The specific requirements are: Mathematics course C, Science B and Social Science A. Science B can be replaced by Physics A and Chemistry A. The minimum grade requirement is "Pass" or 3.

Implementation of the education

Structure of the education

The academic year division into two semesters and four periods, etc. are described in the KTH Handbook 2, Tab 4.2. Each period ends with an examination period. Additional examination periods are after the Holiday Season, in the beginning of June and in August. The complete year consists of 40 weeks of studies. In exceptional cases teaching activities can be placed outside the study year.

Year 1 of studies consists of general courses in mathematics, system development, modeling, and industrial economics. Year 2 consists of more in-depth courses in information system development, business information systems, industrial economy, and discrete mathematics. Year 3 consists of a few mandatory courses, elective courses and a thesis project.

Courses

The programme is course-based. Lists of courses are included in [appendix 1](#).

Optional courses 30 hp

Grading system

Courses in the first and the second cycle are graded on a scale from A to F. A-E are passing grades, A is the highest grade. The grades pass (P) and fail (F) are used for courses under certain circumstances.

Conditions for participation in the programme

Course selections and signing up must be actively made by all students intending to study next (following) semester.

This signing up procedure is a basis for registration and tuition basis for decisions on promotion to the following semester. Course Registration is done via a web-based tools “ Studera.nu”. Signing up for fall semester are made by 15 May and for spring semester by 15 November.

Promotion rules for program in are:

- From year 1 to year 2, 45 credits is needed
- From year 2 to year 3, 90 credits is needed.

Course registration, in course, is done before the third week of the course starting date in order for the notified students to declared that they intend to follow the course.

Recognition of previous academic studies

Recognition of previous academic studies will be done according to KTH regulations, see http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning/prestationer?l=en_UK

Degree project

More detailed description of the requirements for the degree project course can be found in the course syllabus of the chosen degree course.

See KTH regulations for general requirements

http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning/examensarbete?l=en_UK

Degree

After completing the study programme the student needs to apply for a Degree Certificate. This degree is entitled “Teknologie kandidatexamen” - Bachelor of Science. The text on the degree certificate states the educational programme completed by the student.

See KTH local degree regulations

http://intra.kth.se/regelverk/utbildning-forskning/grundutbildning/examina?!=en_UK

[Appendix 1 - Course list](#)

[Appendix 2 - Programme syllabus descriptions](#)



Appendix 1: Course list

Programme syllabus for studies starting in autumn 2009, Bachelor's Programme in Business Engineering (TAFBK)

General courses

Year 1

Mandatory courses (60.0 Credits)

| Code | Name | Credits | Edu. level |
|------------------------|---|---------|-------------|
| ID1013 | Programming Methodology | 7.5 hp | First cycle |
| IV1015 | IT for Personal Work | 7.5 hp | First cycle |
| IV1016 | IT in Organizations | 7.5 hp | First cycle |
| IV1017 | Object Oriented Analysis and Design | 7.5 hp | First cycle |
| IV1018 | Models and Databases | 7.5 hp | First cycle |
| IV1020 | Process Modelling and Design | 9.0 hp | First cycle |
| IX1306 | Mathematics for Economic Applications | 7.5 hp | First cycle |
| ME1004 | Industrial Management, Basic Course | 6.0 hp | First cycle |

Optional courses

| Code | Name | Credits | Edu. level |
|------------------------|--|---------|-------------|
| II1310 | Introduction to Computer Studies | 1.5 hp | First cycle |
| SF1611 | Introductory Course in Mathematics I | 1.5 hp | First cycle |

Year 2

Mandatory courses (60.0 Credits)

| Code | Name | Credits | Edu. level |
|------------------------|--|---------|-------------|
| ID1016 | Logic for Enterprise Systems | 7.5 hp | First cycle |
| IK1001 | Computer Systems and Data Communication | 7.5 hp | First cycle |
| IV1021 | Project Management | 7.5 hp | First cycle |
| IV1022 | System Integration with Enterprise Systems | 9.0 hp | First cycle |
| IV1024 | Enterprise Systems and Service Oriented Architecture | 7.5 hp | First cycle |
| IV1372 | Enterprise Systems, Configuration and Modification | 7.5 hp | First cycle |

| | | |
|--|--------|-------------|
| IX1503 Discrete Mathematics for Business Engineering | 7.5 hp | First cycle |
| ME1005 Industrial Management, Advanced Course | 6.0 hp | First cycle |

Year 3

Mandatory courses (15.0 Credits)

| Code | Name | Credits | Edu. level |
|------------------------|--|---------|-------------|
| ID1017 | Decision and Risk Analysis | 7.5 hp | First cycle |
| IV1025 | Enterprise Systems Project | 7.5 hp | First cycle |

Conditionally elective courses

| Code | Name | Credits | Edu. level |
|------------------------|--|---------|--------------|
| ID2007 | Processes for IT Production | 7.5 hp | Second cycle |
| II1100 | Language Support in Thesis Work | 3.0 hp | First cycle |
| IV1021 | Project Management | 7.5 hp | First cycle |
| IV1023 | Advanced Information Handling with XML | 7.5 hp | First cycle |
| IV2002 | Internet Search and Monitoring Techniques | 7.5 hp | Second cycle |
| IV2010 | Mobile Business | 7.5 hp | Second cycle |
| IV2014 | Data Warehousing | 7.5 hp | Second cycle |
| IV2015 | Knowledge Management | 7.5 hp | Second cycle |
| IV2029 | Global IT-management | 7.5 hp | Second cycle |
| IV2032 | Requirements Engineering | 7.5 hp | Second cycle |
| ME1023 | Industrial Marketing | 6.0 hp | First cycle |
| ME1032 | Economics of Industrial and Technical Transformation | 6.0 hp | First cycle |
| ME2013 | Operations Management: Organization and Control | 6.0 hp | Second cycle |
| ME2024 | Industrial Marketing, Advanced Course | 6.0 hp | Second cycle |
| ME2029 | Finance | 6.0 hp | Second cycle |
| ME2033 | Industrial Dynamics and Technical Change | 6.0 hp | Second cycle |
| ME2041 | Psychology for Engineers | 6.0 hp | Second cycle |
| ME2042 | Business Negotiations | 6.0 hp | Second cycle |
| ME2053 | Logistics & Supply Chain Management | 6.0 hp | Second cycle |

Supplementary information

Students are to shape their specialization profile during year 3 by choosing courses from the list of available courses for the BSc Programme in Business Engineering.



Appendix 2: Specialisations

Programme syllabus for studies starting in autumn 2009, Bachelor's Programme in Business Engineering (TAFBK)

This programme has no specialisations.