



School of Economics and Management

SYSB13, Information Systems: IS and Business Development, 30 credits

*Informationssystem: IS- och verksamhetsutveckling, 30
högskolepoäng*
First Cycle / Grundnivå

Details of approval

The syllabus is an old version, approved by The Board of the Department of Informatics on 2013-09-20 and was valid from 2014-01-20, spring semester 2014.

General Information

The course makes up the third semester of the BSc programme in Design of Information Systems.

Language of instruction: Swedish
Required reading in English may be included.

<i>Main field of studies</i>	<i>Depth of study relative to the degree requirements</i>
Information Systems	G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements
Information Systems	G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Learning outcomes

On completion of the course, the student shall have obtained specialised knowledge of and skills in the design of organisations and information systems (IS), focusing particularly on process design, data modelling and change of ERP systems. Furthermore, the student shall have acquired basic understanding of financial control and financial systems and their connection to ERP systems and organisational development. Finally, the student shall have acquired specialised knowledge of and skills in project work in IS design.

Knowledge and understanding

For a pass on the course, students shall demonstrate knowledge and understanding of

- the use of standard frameworks and ERP (Enterprise Resource Planning) for the standardisation of organisational structures and processes
- tools for the automatisisation and/or support of transaction-intensive activities
- implications of introducing a database system for activities and organisations
- implications of introducing a business system for activities and organisations
- the use of a DBMS (Database Management System) as tools for strategy and control in activities and organisations
- parametric control as change of an ERP system
- the use of business systems as tools of strategy and control in activities and organisations
- conflicts between organisations, individuals and ICT (Information and Communication Technology) systems that can be caused by standard products such as ERP
- database modelling, design and implementation of database systems as a part of enterprise architecture (EA)
- ERP and standard frameworks as manifestations of EA (Enterprise Architecture)
- EA as a structure for service-oriented organisational design
- process modelling as part of EA
- basic concepts and models within strategy, financial control and financial systems
- financial control instruments
- different types of units for financial accountability
- design and use of financial systems

Competence and skills

For a pass on the course, students shall demonstrate competence and skills individually or in groups to

- analyse existing process in a business system (ERP), design a change of the process and introduce the changed process in the existing ERP system
- design and present process models and plans as documentation for a dialogue about change management
- analyse the organisation from the perspective of persistent storage requirements
- apply database modelling to information storage, retrieval and protection of data
- design a database system that can manage large sets of data in accordance with a set database model
- plan the introduction of a database system
- apply simple process modelling to the change of an ERP system with a relevant modelling tool/MDD (Model Run Development) tool
- design and present EA models and plans as documentation for a dialogue about change management
- plan the change of an ERP system as a project using a project support tool
- communicate problems and solutions in both speech and writing
- analyse the strategy, financial control and financial system of a company
- apply basic control tools within strategy, financial control and financial systems in order to identify and solve problems

- identify problems of financial control and financial systems and propose changes to the systems
- identify information risks and propose ways of addressing them
- write a report that describes an IS project and includes individual reflections
- discuss key areas and issues in the required reading

Judgement and approach

For a pass on the course, students shall demonstrate the ability to

- analyse and assess a changed process from the perspectives of efficiency, benefits and use/acceptance/impact on staff
- analyse and assess plans for a project and the internal process of a working group
- assess information systems from a safety and risk perspective
- independently reflect on their own learning process and assess their own change process and goal attainment

Course content

The course includes

- process modelling
- database design
- Enterprise Resource Planning Systems
- financial control
- risk analysis
- enterprise architecture
- project methodology
- information system projects
- information security.

Modules

Enterprise Architecture, Databases, Business Process Modelling, Management Control Systems, Enterprise Systems, Information Security, IS Project.

Course design

The teaching consists of lectures, lessons, seminars, and laboratory exercises.

The course may include compulsory components. They are stated in the timetable.

Assessment

The assessment is based on a written exam, an IS project report and written assignments.

Assessed components including documentation and written reflections are compiled in the student's learning portfolio (subject examined 1312).

Re-examinations are offered in close conjunction with the first examination.

Cheating such as plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 8 of the Higher Education Ordinance). The disciplinary measures that may be taken as a result of such offences are caution or suspension for a limited period of time from the University.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, E, D, C, B, A.

Grades (Designation) Points or percentage of maximum points. Definition.

A (Excellent) 85-100. An excellent result in terms of theoretical depth, practical relevance, analytical ability and independence.

B (Very good) 75-84. A very good result in terms of theoretical depth, practical relevance, analytical ability and independence.

C (Good) 65-74. A good result in terms of theoretical depth, practical relevance, analytical ability and independence.

D (Satisfactory) 55-64. A satisfactory result in terms of theoretical depth, practical relevance, analytical ability and independence.

E (Acceptable) 50-54. A result that satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independence.

U (Inadequate/Fail) 0-49. An inadequate result in terms of theoretical depth, practical relevance, analytical ability and independence.

To pass the course, the students must have been awarded the grade of E or higher.

Grading rules

Exam assessment

The grades A to E and U are applied to exams which are awarded *different passing grades*.

The grades U and G (Fail and Pass) are applied to exams which are *not awarded different passing grades*.

Course assessment

A grade for the entire course is awarded when all exams included in the course have been passed. The assessment is based on all the exams that have been awarded the grades A to E and U and the numbers assigned to the letters according to the following list: A = 15, B = 14, C = 13, D = 12, E = 11.

The exams with different passing grades are weighted according to the following formula:

The number of credits for the exam is multiplied with the value of the grade according to the list above. The total value is then divided by the total number of credits for the exams included. The resulting average is then rounded off to the nearest whole number and the number indicates the relevant course grade in the list above.

Exams awarded the grades of U and G are not included in the calculation of the course grade.

Entry requirements

To be admitted to the course, students must have passed SYSA11 and SYSA12 or the equivalent.

Further information

SYSB13 is a programme-specific course and only students on the BSc in Design of Information Systems are admitted.

SYSB13 may not be included in a degree together with SYSA02 or the equivalent.

For transitional provisions with regard to previous courses, please contact the study adviser for an individual assessment.

If the course is discontinued, there may be limited opportunities for re-examination. Please contact the study adviser for information.

Subcourses in SYSB13, Information Systems: IS and Business Development

Applies from H16

- 1601 Enterprise Architecture, Written Examination, 1,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1602 IS Project, Enterprise Architecture, 3,0 hp
Grading scale: Fail, Pass
Group assignment.
- 1603 Databases, Written Examination, 3,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1604 IS Project, Databases, 4,0 hp
Grading scale: Fail, E, D, C, B, A
Group assignment.
- 1605 Business Process Modelling, Written Examination, 2,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1606 IS Project, Business Processes, 4,0 hp
Grading scale: Fail, E, D, C, B, A
Group assignment.
- 1607 Management Control Systems, Written Examination, 3,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1608 Enterprise Systems, Written Examination, 2,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1609 IS Project, Enterprise Systems, 3,0 hp
Grading scale: Fail, Pass
Group assignment.
- 1610 Information Security, 1,0 hp
Grading scale: Fail, Pass
Group assignment.
- 1611 IS Project, Report, 3,0 hp
Grading scale: Fail, E, D, C, B, A
Group assignment.
- 1612 Mandatory Assignments and Learning Portfolio, 1,0 hp
Grading scale: Fail, Pass
Individual assignment.

Applies from H13

- 1301 Enterprise Architecture, Written Examination, 1,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1302 IS Project, Enterprise Architecture, 3,0 hp
Grading scale: Fail, Pass
Group assignment.
- 1303 Databases, Written Examination, 3,0 hp
Grading scale: Fail, E, D, C, B, A

- Individual exam.
- 1304 IS Project, Databases, 4,0 hp
Grading scale: Fail, E, D, C, B, A
Group assignment.
- 1305 Business Process Modelling, Written Examination, 2,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1306 IS Project, Business Processes, 4,0 hp
Grading scale: Fail, E, D, C, B, A
Group assignment.
- 1307 Management Control Systems, Written Examination, 3,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1308 Enterprise Systems, Written Examination, 2,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1309 IS Project, Enterprise Systems, 3,0 hp
Grading scale: Fail, Pass
Group assignment.
- 1310 Information Security, Written Examination, 1,0 hp
Grading scale: Fail, E, D, C, B, A
Individual exam.
- 1311 IS Project, Report, 3,0 hp
Grading scale: Fail, E, D, C, B, A
Group assignment.
- 1312 Mandatory Assignments and Learning Portfolio, 1,0 hp
Grading scale: Fail, Pass
Individual assignment.