Linnæus University

Course syllabus

Faculty of Technology
Department of Mechanical Engineering

1SE004 Informationsystem i producerande företag, 7,5 högskolepoäng
Information Systems in Manufacturing Companies, 7.5 credits

Main field of study
Total Quality Maintenance

Subject Group
Industrial Engineering and Management

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved 2009-07-24
Revised 2013-09-24 by Faculty of Technology. Review of Literature
The course syllabus is valid from spring semester 2014

Prerequisites
Basic eligibility

Objectives
After completing the course the students are expected to be able to
• give an account of basic concepts like data, information, information technology (IT) and information systems
• give an account of common IT systems in manufacturing companies
• understand the relations between information systems and industrial activities
• choose a suitable IT system on the basis of the needs of an activity

Content
The course comprises the following elements:
- The information concept and closely related concepts
- The structure of IT systems
- The functionality and areas of use of various information systems; communication systems, decision support systems, etc.
- IT and industrial activities
- IT as support for industrial processes; business solutions, ERP, MRPII, CIM, etc.
- IT as a strategic tool
- IT organization
- IT system selection
- IT security; internal and external threats in manufacturing companies

Type of Instruction
The teaching consists of lectures, group work, laboratory work, submitted assignments and a case study.

Examination
The course is assessed with the grades U, 3, 4 or 5.
The examination is based on submitted reports and the oral or written presentation of compulsory assignments

Course Evaluation
When the course has finished, an evaluation is compiled. The results are reported to the students and then archived according to the rules of the school.

Other
Some course elements may involve costs that have to be defrayed by the course participant. The course is offered in English if there are international participants.

Required Reading and Additional Study Material
Required reading
Beynon-Davies, Paul, Business Information Systems, Palgrave McMillan, latest edition, about 250 of 482 pages
Material supplied by the department (in the form of compendiums and references to current websites on commercial IT systems) c.150 p.

Reference literature
Beekman, George Computer Confluence –Exploring Tomorrow's Technology, New Jersey/Prentice Hall, latest edition