Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Engineering

1SE007 Anläggningsplanering och produktionsstyrning, 7,5 högskolepoäng

Facilities Planning and Production Management, 7.5 credits

Main field of study
Total Quality Maintenance

Subject Group
Industrial Engineering and Management

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by Organisational Committee 2009-11-16

The course syllabus is valid from autumn semester 2010

Prerequisites
7.5 hec in Economics, 15 hec in Mathematics and Business Driven Quality Maintenance (SE9001) 7.5 hec or the equivalent.

Expected learning outcomes

After completing the course the students are expected to be able to

- give an acount of how to plan new production facilities and how to modify already existing ones
- understand the layout of a production facility.
- understand the importance of facilities planning for safeguarding the best utilization of the permanent

resources of the facilities to achieve company goals

- give an account of how to plan, manage and control the manufacturing process (including materials, machines, personnel and suppliers)
- use methods and techniques for facilities planning
- analyze existing facilities and suggest improvements in their layout and in the material and production management systems

Content

The course comprises two parts,

Part I: facilities planning and
Part II: production management, including the following elements:

Part I

- Production design, process design and flow schedules design
- Flow and relations between activities in different kinds of production
- Space requirements for work stations and departments (equipment, service, personnel, etc.)
- Material handling systems
- Workshop layout
- Part II:
- Material and production management
- Material requirement planning (MRP and MRPII)
- Capacity planning
- Production control and master production scheduling

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.
On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

The assessment is based on submitted reports and the oral or written presentation of compulsory assignments.

Course Evaluation
A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The course evaluation will be filed at the department.

Credit Overlap
Overlaps completely with SEC926.

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
Tompkins, White, Bozer, Frazelle, Tanchoco, Trevino, *Facilities Planning, latest Edition. Ca 300(734) pages.*

Vollmann, Whybark, Berry., Manufacturing Planning and Control Systems//, latest Edition. Ca 300(836) pages.

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