

SYLLABUS

Planning and Design of the Industrial Plant 7.5 credits A0002A

Industriplanering

Course syllabus admitted: Autumn 2015 Sp 1 - Spring 2017 Sp 4

**DECISION DATE
2015-02-16**

Planning and Design of the Industrial Plant 7.5 credits A0002A

Industriplanering

First cycle, A0002A

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G#	Arbetsvetenskap	Work Science and Ergonomics

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and The course implies knowledge in ergonomics, systematic design, logistics and industrial production environment.

Selection

The selection is based on 1-165 credits.

Examiner

Lena Abrahamsson

Course Aim

The course aims at giving the student the opportunity to actively:

- obtain theoretical and practical knowledge about industrial planning,
- learn working methods suitable for establishment and change of industrial plants,
- practice holistic design of industrial plants under realistic circumstances,
- practice project work and work in project groups under realistic circumstances,
- practice oral presentation and report writing.

A student that has passed the course shall be able to actively and independently work in project groups that work with physical strategic industrial planning at pilot study or pre study level.

Contents

The course has a theoretical and an applied practical part. The following parts are dealt with:

- Organisation of industrial planning work, specification of task, activity, time and resource planning.
- The phases of industrial planning: pilot study, pre study, pre projecting, projecting.
- Connections between industrial planning and community planning.
- Mapping, description and analysis of the present situation and the future.
- Specification of demands, for the design and evaluation of concepts.
- Analysis of industrial location, choice between different building sites, traffic, supply and environmental issues.
- Systematic design of the industrial estate, building sites, buildings, production systems, work organisation and work environment. Short and long term development plans. Building, rebuilding and phase-out of industrial plants.
- Methods for systematic evaluation of concepts.
- Oral presentation and report writing.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures, lessons, practices and visits to industrial plants. Independent project work in groups with access to supervision. A major part of the necessary input data are collected by the students themselves through contacts with industrial companies, authorities and organisations. Criticism of oral presentations and written reports.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. For a passed mark the student need to perform a passed project work, a passed presentation of the examination task and a passed project report. Attendance at seminars and presentations is compulsory.

Remarks

Students must register for the courses themselves, or contact ETKS educational administration eduetks@ltu.se, not later than five days after the quarter commences. Failure to do so can result in the place being lost. This rule also applies to students with a guaranteed place.

Overlap

The course A0002A is equal to ARA107

Literature. Valid from Autumn 2007 Sp 1

Bergenståhl, H & Perborg, L. (1995) Industriell anläggningsteknik, Inst. för teknisk logistik, Lunds tekniska högskola.
Phillips E., J. (1997) Manufacturing Plant Layout, SME, USA
Ranhagen, U (1995) Att arbeta i projekt - om planering och projektering av större förändringar, moderna verktyg och metoder, ASN 1995.

Course offered by

Department of Business Administration, Technology and Social Sciences

Items/credits

Number	Type	Credits	Grade
0001	Written report,presentation of passed project work	7.5	U G#

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Director of Undergraduate Studies Bo Jonsson, Department of Business Administration, Technology and Social Sciences 2015-02-16

Syllabus established

by Kursplanen har fastställts av Institutionen för arbetsvetenskap 2007-02-28