



# AI2804 Design and production Management 7.5 credits

## Projekterings- och produktionsledning

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

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for AI2804 valid from Spring 2011

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Built Environment

## Specific prerequisites

Construction Project Management (Third edition) by F. Gould & N. Joyce. Prentice Hall.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

The course gives an overall picture of the construction project manager's tasks. The students apply knowledge gained in preparatory courses in a real building project. While facing realistic conditions the students are trained in managing a building project. Students should also have a general understanding of different value adding activities and conditions of all involved disciplines.

The course aims to provide the students with skills to plan, organise, conduct and follow up a building project from conceptual design to production planning. After the course the student should be able to

1. analyse design brief and land use planning requirements to determine the conditions for a building project,
2. plan and organise the design process,
3. evaluate and choose building design with technical solutions for foundations, structural frame, service systems for heating, ventilation, sanitary appliances and electricity,
4. conduct early as well as detailed cost planning and calculation,
5. plan building production,
6. evaluate chosen design solutions against the project's preconditions,
7. conduct a tendering process and make agreements for design and production,
8. manage the project team,
9. make a communication plan,
10. apply web based project network,
11. present results orally and in written form.

## Course contents

Design brief and architectural design. Time- and resource planning. Cost estimating. Preparation and coordination of detailed design models and documentation. Choice of technical systems. Production planning and scheduling. Construction contracts. Legal structure. Cost control. Material Management. Safety. Risk analyses. Evaluation. Communication plan. Web based project management. Presentation.

## Course literature

Construction Management, Halpin, W., Daniel, John Wiley (2006).  
Selected articles will be announced at the course introduction.  
Additional literature will depend on the project task.

## Examination

- PRO1 - Project work, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## **Ethical approach**

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.