

**SYLLABUS**

# **Process Improvements methods 7.5 credits W7004T**

**Processeffektivisering, träteknik**

**Course syllabus admitted: Autumn 2013 Sp 1 - Spring 2014 Sp 4**

**DECISION DATE  
2013-02-15**

# Process Improvements methods 7.5 credits W7004T

## Processeffektivisering, träteknik

### Second cycle, W7004T

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Träfysik	Wood Physics and Wood Technology

### Main field of study

Wood Technology

## Entry requirements

A Bachelor degree, a minimum of 180 credits, with a scientific or technical profile of at least 60 credits and includes at least 15 credits in mathematics.

## Selection

The selection is based on 30-285 credits

## Examiner

Micael Öhman

## Course Aim

After the course, you are expected to have acquired an understanding of how to analyze and streamline a process. This course focuses on production processes and how the individual work steps form a whole, with an emphasis on methods for continuous improvement / LEAN.

## Contents

Emphasis is placed on understanding and analyzing a process from a flow perspective. Centrally are:

- To identify process bottlenecks .
- To calculate the different efficiency rate as productivity , lead time, utilization / OEE , etc.
- Production control
- Basic LEAN concepts

Discrete event simulation will be used to evaluate and test the different methods described in the literature of the course.

## Realization

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

The course consists of a combination of theoretical studies in combination with tutorials, seminars and laboratory work. With tutorial means that you and your supervisor are discussing the content of the theory you read in order for you to reach a higher understanding of the subject .

The course is divided into:

- Process Flows 1/3
- Lean and continuous improvement 1/3
- Production Simulation 1/3

## 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.

Continuous examination will be applied throughout course.

Dependent of the number of students and the specific part both oral and written exam can be used.

In addition compulsory assignments and laboratory reports will be included in the examination.

## Literature. Valid from Autumn 2013 Sp 1

## Course offered by

Department of Engineering Sciences and Mathematics

## Items/credits

No items/credits available

## 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.

## Syllabus established

by Mats Naesstroem 2013-02-15