



International Production Engineering

International Production Engineering/Internationell produktionsteknik

7.5 credits

Ladok Code: 41T06B

Version: 3.0

Established by: The Teaching Committee 2012-11-09

Valid from: Autumn 2012

Education Cycle: First cycle

Main Field of Study (Progressive Specialisation): Industrial Economics (G1F)

Disciplinary Domain: Technology

Prerequisites: Meets the requirements for acceptance as a Graduate Engineer.

Subject Area: Industrial Engineering and Management

Grading Scale: ECTS-credits

Content

- The link between product development and design alterations and production engineering
- Production in cooperation with other elements within a company
- Enhancement projects
- Production layout
- Production systems
- Preparation, method development and work surveying
- Lean Production
- Value flow analysis
- Relevant lean tools and techniques such as
- OEE (Overall Equipment Effectiveness)
- Single-Minute Exchange of Die (SMED)
- 5S
- Standardised working methods
- The basics for dimensioning a kanban system
- PDCA
- Enhancement work according to Kaizen
- Timing
- TOC (Theory of Constraints)
- Automation
- Dupont schedule, and enhancement work from a corporate economics standpoint
- Various strategies and methods for developing the production process

Learning Outcomes

After having completed this course, students will:

- be able to participate in production engineering development work at a basic level within a manufacturing company
- describe the most important concepts and basic working methods in production engineering
- explain how a production engineering process can be streamlined

Forms of Teaching

The teaching will comprise lectures, laboratory experiments, seminars, submission information and exercises.

Forms of Examination

The course will be examined through the following examination elements:

Laboratory experiments

Learning outcomes:

Credits: 0.5

Grading scale: Fail (U) or Pass (G)

Written examination

Learning outcomes:

Credits: 4

Grading scale: ECTS-credits

Seminars with written submission

Learning outcomes:

Credits: 3

Grading scale: Fail (U) or Pass (G)

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

Bellgran, M., och Säfsten, K., (2010) : Production Development, Design and Operation of Production Systems, Springer

Articles and other information will be announced at the start of the course.

Student Influence and Evaluation

The head of department and teacher responsible for the course are responsible for ensuring that students are invited systematically and regularly to put forward their views on the course. The results of the evaluations will be reported back to the students and will form the basis for the future structure of the course.

Miscellaneous