Blekinge Institute of Technology
Department of Mechanical Engineering

COURSE SYLLABUS

Lean Produktion

Lean Production

7,5 ECTS credit points (7,5 högskolepoäng)

Course code: MT1444
Educational level: First cycle
Course level: G1N
Field of education: Technology
Subject group: Mechanical Engineering

Subject area: Mechanical Engineering
Version: 16
Applies from: 2013-07-01
Approved: 2013-05-29
Replaces course syllabus approved: 2011-03-25

1 Course title and credit points
The course is titled Lean Production/Lean Produktion and awards 7,5 ECTS credits. One credit point (högskolepoäng) corresponds to one credit point in the European Credit Transfer System (ECTS).

2 Decision and approval
This course is established by Department of Mechanical Engineering 2013-05-29. The course syllabus was revised by School of Engineering and applies from 2013-07-01. The course is replaced with MT1414, Lean Produktion.
Reg.no: BTH-4.1.1-0506-2013.
Replaces MT1414.

3 Objectives
The purpose of this course is to provide an overview of the concept of lean production and an understanding of the relationship between philosophy, principles and tools of Lean production.

4 Content
• The underlying philosophy, strategies and principles of Lean production
• Stable processes
• Continuous improvement and standardized approach
• Visual management and 5S
• Set up time Reduction
• Pulling production system and Kanban
• Smoothed production
• Continuous flow
• Value Flow
• Hoshin planning and Jidoka

5 Aims and learning outcomes
After the course the student should be able to:
•describe the basic strategies and principles of Lean production
•explain the purpose of setup reduction, and describe the methodology for setup reduction
•explain the purpose of the tools 5S and standardized way of working and be able to describe the methodology of these tools
•describe the visual management tool
•compare the pull and push production systems
•conduct a value stream analysis in a production section in an enterprise
•explain the importance of continual improvements in a Lean Enterprise
•apply the PDCA method for continuous improvement
•describe the requirements and methods for implementation of Lean production

6 Generic skills

7 Learning and teaching
The literature is studied individually and then applied to a number of tasks to be submitted individually. The supervisor of the course then examines the data submitted and provide comments on them.
Swedish

8 Assessment and grading
Examination of the course

Code	Module	Credit	Grade
	Assignment 1	1.5 ECTS	G-U
	Assignment 2	1.5 ECTS	G-U
	Assignment 3	1.5 ECTS	G-U
	Assignment 4	1.5 ECTS	G-U
	Examination	1.5 ECTS	A-F

The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Fail, supplementation required, F Fail.If grade FX or UX are given, the student may after consultation with the course coordinator / examiner get an opportunity to within six weeks complement to grade E or G for the specific course element.

9 Course evaluation
The course coordinator is responsible for systematically gathering feedback from the students in course evaluations and making sure that the results of these feed back into the development of the course.

10 Prerequisites
General requirements for university studies.

11 Field of education and subject area
The course is part of the field of education and is included in the subject area Mechanical Engineering.

12 Restrictions regarding degree
The course cannot form part of a degree with another course, the content of which completely or partly corresponds with the contents of this course.

13 Course literature and other teaching material
Liker, Jeffery K. (2009). / / The Toyota Way. / /
Edition 1. Liber AB, Malmö.
ISBN: 978-91-47-08902 -4.
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