



Course syllabus

Projekt - Industriell produktion Project - Production and Materials Engineering

MMTN15, 7,5 credits, A (Second Cycle)

Valid for: 2023/24 Faculty: Faculty of Engineering, LTH Decided by: PLED M Date of Decision: 2023-04-11

General Information

Elective for: I5, M5, MD5, MPRR2 **Language of instruction:** The course will be given in English on demand

Aim

The purpose of the course is for the student to work with a larger task, in order to reach deeper knowledge within the area of production technology and adjacent areas. The students will choose the area of interest individually.

Learning outcomes

Knowledge and understanding For a passing grade the student must

- show deepened knowledge in the chosen area.
- individually describe and document the chosen area in a written report.

Competences and skills

For a passing grade the student must

- show the ability to individually plan and carry through a major project task.
- before a technically competent audience, orally present the chosen subject.

Judgement and approach For a passing grade the student must • show the ability to identify and utilize further knowledge witin the choosen area of interest.

Contents

An applied or theoretical study of a subject chosen by the student. The student can chose to deepen his/her knowledge in the following topics, manufacturing methods, production technology, applied FEM, applied material science, manufacturing systems and manufacturing economics. The study can be in the form of a small development project or as a pre-study of the thesis work. A requirement is that the work is clearly defined and corresponds to 200 hours of studies.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five) **Assessment:** Written report and an oral presentation.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Admission requirements:

• MMT012 Production and Manufacturing Methods or MMTA05 Production Systems or MMTF20 Production and Manufacturing Methods

Assumed prior knowledge: One of the following courses MMT160/MMTF25 CAD/CAM/CAE, MMT031/MMTN25 Production Technology, MMT045/MMTN30 Manufacturing Systems, MMTN31 Sustainable manufacturing systems, MMT125/MMTN35 Applied FEM or MMT015/MMTN20 Material and Process Selection.

The number of participants is limited to: No **The course overlaps following course/s:** MMTN01

Reading list

• Established in conference with the examiner.

Contact and other information

Course coordinator: Jan-Eric Ståhl, jan-eric.stahl@iprod.lth.se Course coordinator: Mats Andersson, mats.andersson@iprod.lth.se Course coordinator: Hans Walter, hans.walter@iprod.lth.se Course coordinator: Fredrik Schultheiss, fredrik.schultheiss@iprod.lth.se Course coordinator: Volodymyr Bushlya, volodymyr.bushlya@iprod.lth.se Course coordinator: Jinming Zhou, jinming.zhou@iprod.lth.se Course coordinator: Christina Windmark, christina.windmark@iprod.lth.se Course coordinator: Filip Lenrick, filip.lenrick@iprod.lth.se Course coordinator: Filip Lenrick, filip.lenrick@iprod.lth.se Course homepage: http://www.iprod.lth.se Further information: The student must come up with a proposal for the project. Contact must be made with a course coordinator well in advance of the start of the course and the proposed project must be approved by the department. The work can be carried out at any time during the academic year.