# ML160X Degree Projekt in Industrial Technology and Production Maintenance, First Cycle 15.0 credits

**Examensarbete inom Industriell teknik och produktionsunderhåll**

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

This official course syllabus is valid from the spring semester 2023 in accordance with decision M-2022-1409 by the Dean of the ITM School.

## Grading scale

P, F

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

Specific entry requirements: 120 credits from finished mandatory courses and within this credits this courses need to be passed: ML1000,ML1611, ML1613 and ML1616

## Language of instruction

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

## Intended learning outcomes

After completed degree project, the student should be able to:

1. demonstrate knowledge of the chosen topic's disciplinary foundation and proven experience, and some insight into current research and development
2. holistically, critically and systematically search, collect and integrate knowledge, and identify the need for further knowledge
3. formulate, assess and handle problems and critically discuss issues
4. plan and carry out tasks within given time frames with suitable methods, and evaluate this work
5. design and handle products, processes, methods, systems or technical solutions, taking into consideration people's abilities and needs, and society's aim for economically, socially and ecologically sustainable development
6. demonstrate the ability to account for and discuss information, problems and solutions, orally and in writing in dialogue with different groups
7. demonstrate the ability to make assessments considering relevant scientific, social and ethical aspects
8. work independently as an engineer

## Course contents

- Pilot study
- Problem formulation, goal, aim and delimitations
- Literature study or information retrieval that show current knowledge in technology
- Choice of method, the problem-solving approach
- Problem-solving
- Report, where strong emphasis is placed on analyses, results, independent conclusions and recommendations

## Examination

- XUPP - Thesis project, 15.0 credits, grading scale: P, 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.

The examiner decides, in consultation with KTH's coordinator for disabilities (Funka), about possible adapted examination for students with documented, permanent disabilities. The examiner may permit other examination format for re-examination of individual students.

## Other requirements for final grade

Attendance at specified compulsory course dates (or completed compensation assignment to these) are requirements for final grading.

## 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.