



# AK203V Decision Theory for Professionals 2.5 credits

## Beslutsteori för yrkesverksamma

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

09/07/2020, the Dean of the ABE School has decided to establish this official course syllabus to apply from autumn term 2020 (registration number: A-2020-1538).

## Grading scale

P, F

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

120 credits higher education

## Language of instruction

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

## Intended learning outcomes

On completion of the course, the student should be able to:

- give an account of the basic concepts that are used in decision theory,
- give an account of the basics of formalisation of decision problems, choices of decision-theoretical method and decision under risk and uncertainty,
- discuss and problematise the formalisation of decision problems and justify the choice of decision-theoretical method given a certain decision problem under risk and uncertainty,
- discuss decision-theoretical issues from a philosophical perspective,
- discuss and problematise decision theory and decision making methods in practical and professional contexts.

## Course contents

- Introduction to decision theory and concepts such as rationality, preferences, aims, uncertainty and utility,
- presentation and application of decision-theoretical methods,
- introduction to decision making under risk and uncertainty,
- philosophical perspective on decision-theoretical questions,
- exercise in formalisation and analysis of decision problems.

## Examination

- PRO1 - Projekt, 2.5 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.

## Other requirements for final grade

Active participation in seminars.

## 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.

