

## COURSE DETAIL

### PROBABILITY THEORY

**Country**

Norway

**Host Institution**

University of Oslo

**Program(s)**

University of Oslo

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Statistics Mathematics

**UCEAP Course Number**

108

**UCEAP Course Suffix****UCEAP Official Title**

PROBABILITY THEORY

**UCEAP Transcript Title**

PROBABILITY THEORY

**UCEAP Quarter Units**

8.00

**UCEAP Semester Units**

5.30

## Course Description

The course gives an introduction to probability theory in a measure-theoretic setting. Among the topics discussed are: Probability measures,  $\sigma$ -algebras, conditional expectations, convergence of random variables, the law of large numbers, characteristic functions, the central limit theorem, filtrations, and martingales in discrete time. Recommended prerequisites include calculus, linear algebra, and probability and statistical modeling.

## Language(s) of Instruction

English

## Host Institution Course Number

STK-MAT3710

## Host Institution Course Title

PROBABILITY THEORY

## Host Institution Course Details

<https://www.uio.no/studier/emner/matnat/math/STK-MAT3710/index-eng.html>

## Host Institution Campus

## Host Institution Faculty

Mathematics and Natural Sciences

## Host Institution Degree

Bachelor

## Host Institution Department

Mathematics

## Course Last Reviewed

2024-2025

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