

# COURSE DETAIL

## NUMBER THEORY

**Country**

Sweden

**Host Institution**

Lund University

**Program(s)**

Lund University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mathematics

**UCEAP Course Number**

140

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

NUMBER THEORY

**UCEAP Transcript Title**

NUMBER THEORY

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

The course treats multiplicative number theoretic functions, Möbius inversion formula, properties of Euler's totient function, primitive roots and indices, quadratic residues, the Legendre symbol and its properties, the quadratic reciprocity theorem, representations of integers as sums of squares, number theoretic properties of the Fibonacci sequence, continued fractions, Diophantine approximation.

### Language(s) of Instruction

English

### Host Institution Course Number

MATM35

### Host Institution Course Title

NUMBER THEORY

### Host Institution Course Details

<https://www.lunduniversity.lu.se/lubas/i-uoh-lu-MATM35>

### Host Institution Campus

Lund

### Host Institution Faculty

Science

### Host Institution Degree

### Host Institution Department

### Course Last Reviewed

2024-2025

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