

COURSE DETAIL

ALGEBRA II

Country

Germany

Host Institution

Technical University Berlin

Program(s)

Technical University Berlin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

113

UCEAP Course Suffix**UCEAP Official Title**

ALGEBRA II

UCEAP Transcript Title

ALGEBRA II

UCEAP Quarter Units

8.50

UCEAP Semester Units

5.70

Course Description

Algebra II provides an introduction to commutative algebra, on which both algebraic geometry and algebraic number theory are built. In fact, commutative algebra provides the tools for local studies in algebraic geometry, much like multivariate calculus is the main tool for local studies in differential geometry. This course closely follows "Introduction to Commutative Algebra" by Atiyah and Macdonald but may be complemented with some additional material, e.g. concerning Gröbner bases. The prerequisite course Algebra I explained the basic notions of algebra: groups, rings, fields, and factor structures, culminating in Galois theory.

Language(s) of Instruction

English

Host Institution Course Number

3236 L 270

Host Institution Course Title

ALGEBRA II

Host Institution Course Details

<https://moseskonto.tu-berlin.de/moses/modultransfersystem/bolognamodule/beschre...>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Institut für Mathematik

Course Last Reviewed

2025-2026

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