

COURSE DETAIL

ALGEBRA III

Country

United Kingdom - England

Host Institution

Imperial College London

Program(s)

English Universities, Imperial College London

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

142

UCEAP Course Suffix**UCEAP Official Title**

ALGEBRA III

UCEAP Transcript Title

ALGEBRA III

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

In this course, students study the following topics: rings, integral domains, unique factorization domains, modules, ideals homomorphisms, quotient rings, submodules quotient modules, fields, maximal ideals, prime ideals, principal ideal domains, Euclidean domains, rings of polynomials, Gauss's lemma, Eisenstein's criterion, field extensions, Noetherian rings and Hilbert's basis theorem, dual vector space, tensor algebra and Hom, basics of homological algebra, and complexes and exact sequences.

Language(s) of Instruction

English

Host Institution Course Number

M3P8

Host Institution Course Title

ALGEBRA III

Host Institution Campus

Imperial College London

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

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