

# University of Pretoria Yearbook 2022

## Algebra 731 (WTW 731)

**Qualification** Postgraduate

**Faculty** [Faculty of Natural and Agricultural Sciences](#)

**Module credits** 15.00

**NQF Level** 08

**Programmes** [BScHons \(Mathematics and Mathematics Education\) \(Algebra and Analysis\)](#)

[BScHons Mathematics](#)

**Prerequisites** Algebra on third-year level

**Contact time** 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Mathematics and Applied Mathematics

**Period of presentation** Semester 1

### Module content

The following topics will be covered: Galois theory and solving equations by radicals, introduction to the theory of R-modules, direct sums and products, projectivity and injectivity, finitely generated modules over Euclidean domains, primary factorisation, applications to Jordan and rational canonical forms of matrices.

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