



University of Pretoria Yearbook 2019

Algebra 381 (WTW 381)

Qualification Undergraduate

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

Module credits 18.00

Programmes [BCom](#)

[BSc Computer Science](#)

[BSc Applied Mathematics](#)

[BSc Geology](#)

[BSc Mathematical Statistics](#)

[BSc Mathematics](#)

[BSc Physics](#)

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Education

Faculty of Economic and Management Sciences

Faculty of Humanities

Prerequisites WTW 114 and WTW 211

Contact time 1 tutorial per week, 2 lectures per week

Language of tuition Afrikaans and English are used in one class

Department Mathematics and Applied Mathematics

Period of presentation Semester 1

Module content

Group theory: Definition, examples, elementary properties, subgroups, permutation groups, isomorphism, order, cyclic groups, homomorphisms, factor groups. Ring theory: Definition, examples, elementary properties, ideals, homomorphisms, factor rings, polynomial rings, factorisation of polynomials. Field extensions, applications to straight-edge and compass constructions.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of each student to familiarise himself or herself well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.