

University of Pretoria Yearbook 2020

Algebra 381 (WTW 381)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	18.00
Programmes	BCom
	BCom Statistics and Data Science
	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.

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