



University of Pretoria Yearbook 2017

Discrete structures 115 (WTW 115)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	8.00
Programmes	BIT Information Technology BSc Computer Science BSc Information and Knowledge Systems BSc Applied Mathematics BSc Chemistry BSc Extended programme - Mathematical Sciences 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
Prerequisites	Refer to Regulation 1.2: A candidate must have passed Mathematics with at least 50% in the Grade 12 examination
Contact time	2 lectures per week, 1 tutorial per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Mathematics and Applied Maths
Period of presentation	Semester 1

Module content

Propositional logic: truth tables, logical equivalence, implication, arguments. Mathematical induction and well-ordering principle. Introduction to set theory. Counting techniques: elementary probability, multiplication and addition rules, permutations and combinations, binomial theorem, inclusion-exclusion rule.

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