



# University of Pretoria Yearbook 2016

## Discrete structures 115 (WTW 115)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	Faculty of Natural and Agricultural Sciences
<b>Module credits</b>	8.00
<b>Programmes</b>	BIT Information Technology BSc Information Technology Information and Knowledge Systems BSc(Computer Science) Computer Science BSc Applied Mathematics BSc Chemistry BSc Extended programme - Mathematical Sciences BSc Geography BSc Geology BSc Mathematical Statistics BSc Mathematics BSc Meteorology BSc Physics
<b>Service modules</b>	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences
<b>Prerequisites</b>	Refer to Regulation 1.2: A candidate must have passed Mathematics with at least 50% in the Grade 12 examination
<b>Contact time</b>	1 tutorial per week, 2 lectures per week
<b>Language of tuition</b>	Both Afr and Eng
<b>Academic organisation</b>	Mathematics and Applied Maths
<b>Period of presentation</b>	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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