



# University of Pretoria Yearbook 2020

## Discrete structures 115 (WTW 115)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	8.00
<b>Programmes</b>	<a href="#">BSc Computer Science</a> <a href="#">BSc Information and Knowledge Systems</a> <a href="#">BSc Applied Mathematics</a> <a href="#">BSc Chemistry</a> <a href="#">BSc Extended programme - Mathematical Sciences</a> <a href="#">BSc Mathematical Statistics</a> <a href="#">BSc Mathematics</a> <a href="#">BSc Meteorology</a> <a href="#">BSc Physics</a>
<b>Service modules</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a> <a href="#">Faculty of Economic and Management Sciences</a>
<b>Prerequisites</b>	50% for Mathematics in Grade 12
<b>Contact time</b>	1 tutorial per week, 2 lectures per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Mathematics and Applied Mathematics
<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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