



# University of Pretoria Yearbook 2017

## 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="#">BIT Information Technology</a> <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 Physics</a>
<b>Service modules</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a> <a href="#">Faculty of Education</a> <a href="#">Faculty of Economic and Management Sciences</a>
<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>	2 lectures per week, 1 tutorial per week
<b>Language of tuition</b>	Separate classes for Afrikaans and English
<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.

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 students to familiarise themselves 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.