

# University of Pretoria Yearbook 2022

## Calculus 114 (WTW 114)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	Faculty of Natural and Agricultural Sciences
<b>Module credits</b>	16.00
<b>NQF Level</b>	05
<b>Programmes</b>	BCom (Statistics and Data Science)
	BCom
	BCom (Econometrics)
	BEd (Senior Phase and Further Education and Training Teaching)
	BSc (Computer Science)
	BSc (Meteorology)
	BSc (Actuarial and Financial Mathematics)
	BSc (Applied Mathematics)
	BSc (Chemistry)
	BSc (Engineering and Environmental Geology)
	BSc (Geography and Environmental Science)
	BSc (Geology)
	BSc (Mathematical Statistics)
	BSc (Mathematics)
	BSc (Physics)
<b>Service modules</b>	Faculty of Engineering, Built Environment and Information Technology
	Faculty of Education
	Faculty of Economic and Management Sciences
	Faculty of Humanities
<b>Prerequisites</b>	60% for Mathematics in Grade 12
<b>Contact time</b>	1 tutorial per week, 4 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

\*This module serves as preparation for students majoring in Mathematics (including all students who intend to enrol for WTW 218 and WTW 220). Students will not be credited for more than one of the following modules for their degree: WTW 114, WTW 158, WTW 134, WTW 165.

Functions, limits and continuity. Differential calculus of single variable functions, rate of change, graph sketching, applications. The mean value theorem, the rule of L'Hospital. Definite and indefinite integrals, evaluating definite integrals using anti-derivatives, the substitution rule.

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