



---

# University of Pretoria Yearbook 2016

---

## Mathematics 144 (WTW 144)

**Qualification** Undergraduate

**Faculty** [Faculty of Natural and Agricultural Sciences](#)

**Module credits** 8.00

**Programmes** [BSc Extended programme - Biological and Agricultural Sciences](#)

**Prerequisites** WTW 133

**Contact time** Foundation Course, MAMELODI, 1 tutorial per week, 3 lectures per week

**Language of tuition** English

**Academic organisation** Mathematics and Applied Maths

**Period of presentation** Semester 2

### Module content

Functions: Rate of change, exponential functions, the natural logarithm, exponential growth and decay, proportionality, power functions, fitting formulas to data. Rates of change and the derivative: Instantaneous rate of change, the derivative function, interpretations of the derivative, the second derivative.

Differentiation: Formulas and rules, applications, extremes of a function. All topics are studied in the context of applications.

---

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.