



---

# University of Pretoria Yearbook 2019

---

## Continuum mechanics 387 (WTW 387)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	18.00
<b>Programmes</b>	<a href="#">BSc Applied Mathematics</a> <a href="#">BSc Geology</a> <a href="#">BSc Mathematical Statistics</a> <a href="#">BSc Mathematics</a> <a href="#">BSc Meteorology</a> <a href="#">BSc Physics</a>
<b>Prerequisites</b>	WTW 248 and WTW 286/264
<b>Contact time</b>	1 tutorial per week, 2 lectures per week
<b>Language of tuition</b>	Afrikaans and English are used in one class
<b>Department</b>	Mathematics and Applied Mathematics
<b>Period of presentation</b>	Semester 2

### Module content

Kinematics of a continuum: Configurations, spatial and material description of motion. Conservation laws. Analysis of stress, strain and rate of deformation. Linear constitutive equations. Applications: Vibration of beams, equilibrium problems in elasticity and special cases of fluid motion.

---

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.