

## University of Pretoria Yearbook 2018

## Continuum mechanics 387 (WTW 387)

| Qualification          | Undergraduate                                |
|------------------------|--|
| Faculty                | Faculty of Natural and Agricultural Sciences |
| Module credits         | 18.00  |
| Programmes             | BSc Applied Mathematics                      |
|                        | BSc Geology                                  |
|                        | BSc Mathematical Statistics                  |
|                        | BSc Mathematics                              |
|                        | BSc Physics                                  |
| Service modules        | Faculty of Education                         |
| Prerequisites          | WTW 248 and WTW 286/264                      |
| Contact time           | 1 tutorial per week, 2 lectures per week     |
| Language of tuition    | Afrikaans and English are used in one class  |
| Department             | Mathematics and Applied Mathematics          |
| Period of presentation | 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.