



University of Pretoria Yearbook 2018

Continuum mechanics 387 (WTW 387)

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| 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.

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