

University of Pretoria Yearbook 2022

Continuum mechanics 387 (WTW 387)

| Qualification | Undergraduate |
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| Faculty | Faculty of Natural and Agricultural Sciences |
| Module credits | 18.00 |
| NQF Level | 07 |
| Programmes | BSc (Meteorology) |
| | BSc (Applied Mathematics) |
| | BSc (Chemistry) |
| | BSc (Geology) |
| | BSc (Mathematical Statistics) |
| | BSc (Mathematics) |
| | BSc (Physics) |
| Prerequisites | WTW 248 and WTW 286/264 |
| Contact time | 1 tutorial per week, 2 lectures per week |
| Language of tuition | Module is presented in English |
| 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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