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 or WTW 264
Contact time	2 lectures per week, 1 tutorial per week
Language of tuition	Afrikaans and English is used in one class
Academic organisation	Mathematics and Applied Maths
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.