



University of Pretoria Yearbook 2018

Mechanics 122 (SWK 122)

Qualification Undergraduate

Faculty [Faculty of Engineering, Built Environment and Information Technology](#)

Module content Equivalent force systems, resultants. Newton's laws, units. Forces acting on particles. Rigid bodies: principle of transmissibility, resultant of parallel forces. Vector moments and scalar moments. Relationship between scalar- and vector moments. Couples. Equivalent force systems on rigid bodies. Resultants of forces on rigid bodies. Equilibrium in two and three dimensions. Hooke's law. Trusses and frameworks. Centroids and second moments of area. Beams: distributed forces, shear force, bending moment, method of sections, relationship between load, shear force and bending moment.

Module credits 16.00

Programmes [BEng Chemical Engineering](#)
[BEng Chemical Engineering ENGAGE](#)
[BEng Civil Engineering](#)
[BEng Civil Engineering ENGAGE](#)
[BEng Computer Engineering](#)
[BEng Computer Engineering ENGAGE](#)
[BEng Electrical Engineering](#)
[BEng Electrical Engineering ENGAGE](#)
[BEng Electronic Engineering](#)
[BEng Electronic Engineering ENGAGE](#)
[BEng Industrial Engineering](#)
[BEng Industrial Engineering ENGAGE](#)
[BEng Mechanical Engineering](#)
[BEng Mechanical Engineering ENGAGE](#)
[BEng Metallurgical Engineering](#)
[BEng Metallurgical Engineering ENGAGE](#)
[BEng Mining Engineering](#)
[BEng Mining Engineering ENGAGE](#)
[BSc Engineering and Environmental Geology](#)
[BSc Geology](#)



BSc Meteorology

Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	WTW 158
Contact time	2 tutorials per week, 4 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Civil Engineering
Period of presentation	Semester 2

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