University of Pretoria Yearbook 2019

Dynamics 210 (MSD 210)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module content	Kinetics of systems of particles, Newton's 2nd law generalised for a system of particles, rate of change of momentum and angular momentum relations, work-energy relations, conservation laws, steady mass flow. Plane kinematics of rigid bodies, rotation, translation, general 2D motion, relative motion analysis. Moments and products of inertia. Plane kinetics of rigid bodies, equations of motion, rotation, translation, general 2D motion, work-energy relations. Vibration and time response.
Module credits	16.00
Programmes	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
Prerequisites	FSK 116 or FSK 176 and SWK 122 and WTW 256 #
Contact time	2 tutorials per week, 3 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Department	Mechanical and Aeronautical Engineering
Period of presentation	Semester 1