

University of Pretoria Yearbook 2022

Introductory physics 162 (CGS 162)

Qualification Undergraduate

Faculty [Faculty of Natural and Agricultural Sciences](#)

Module credits 8.00

NQF Level 05

Prerequisites CGS 152

Contact time 2 discussion classes per week, 2 lectures per week, 2 practicals per week

Language of tuition Module is presented in English

Department Physics

Period of presentation Semester 2

Module content

Kinematics: Basic concepts in kinematics in vector notation; different representations to describe motions; instantaneous velocity; acceleration; equations of motion (constant acceleration). Dynamics: Interactions, Newton's third law, Newton's first and second law; gravitation; normal force and friction. Forces in two dimensions: resolving and adding forces. Work energy and power. Electricity: Static and flowing electricity, current, potential difference, power, resistance, simple DC-circuits.

Practicals related to the topics.

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