

University of Pretoria Yearbook 2022

Power electronics 320 (EDF 320)

Qualification Undergraduate

Faculty Faculty of Engineering, Built Environment and Information Technology

Module credits 16.00

NQF Level 07

Programmes BEng (Electrical Engineering)

BEng (Electrical Engineering) ENGAGE

Prerequisites ELX 311 GS, ELI 220 GS

Contact time 1 practical per week, 1 tutorial per week, 3 lectures per week

Language of tuition Module is presented in English

Department Electrical, Electronic and Computer Engineering

Period of presentation Semester 2

Module content

This module covers semiconductor components (power diodes, silicon-controlled-rectifiers, power MOSFETs, IGBTs, emerging devices), ancillary issues (heat sinks, snubbers, gate drive circuits), and converter topologies (AC to DC converters, DC to DC converters).

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