



University of Pretoria Yearbook 2017

Microwaves and antennas 320 (EMZ 320)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module content	Smith Chart;transients; Waveguides, stripline, microstripline; Network analysis,S-parameters, signal flow diagrams, matching networks; Power divider; Filter implementation, Richard's transformation, Kuroda'a identities; Antenna fundamentals, port and radiation characteristics, Friis transmission equation, halfwave dipole, aperture antennas, linear arrays, microstrip patch antenna and arrays; Antenna applications, satellite, base stations, adaptive beams; Radar range equation.
Module credits	16.00
Programmes	BEng Electronic Engineering BEng Electronic Engineering ENGAGE
Prerequisites	EMZ 310 GS, ENE 310 GS
Contact time	3 lectures per week, 1 tutorial per week, 1 practical per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Electrical, Electronic and Com
Period of presentation	Semester 2

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