

# University of Pretoria Yearbook 2021

## Mobile communication 732 (ETR 732)

**Qualification** Postgraduate

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

**Module credits** 32.00

**NQF Level** 08

**Prerequisites** No prerequisites.

**Contact time** 32 contact hours per semester

**Language of tuition** Module is presented in English

**Department** Electrical, Electronic and Computer Engineering

**Period of presentation** Semester 2

### Module content

Introduction to wireless, cellular, digital PCS mobile radio communication. Radio propagation and cellular engineering concepts. Digital MODulation-DEModulation (MODEM) techniques (cellular modulation standards). Error control coding for fading channels. Access technologies (FDMA, TDMA, CDMA, OFDMA, SDMA and hybrids). Spread-spectrum systems and concepts. Diversity techniques for mobile wireless radio systems. Cellular and wireless systems engineering (mobile cellular design). Adaptive equalisers for fading channels.

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