



# University of Pretoria Yearbook 2021

## Digital systems 220 (ERS 220)

**Qualification** Undergraduate

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

**Module credits** 16.00

**NQF Level** 06

**Programmes** [BEng Computer Engineering](#)

[BEng Computer Engineering ENGAGE](#)

[BEng Electrical Engineering](#)

[BEng Electrical Engineering ENGAGE](#)

[BEng Electronic Engineering](#)

[BEng Electronic Engineering ENGAGE](#)

**Prerequisites** No prerequisites.

**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

Introduction to digital circuit design, digital representations of numbers, device electronics in digital circuits, representation and simplification of logic functions, components of combinational circuits, analysis and design of combinational circuits, components of sequential circuits, analysis and design of sequential circuits, programmable components for combinatorial and sequential logic.

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