



University of Pretoria Yearbook 2019

Microprocessors 310 (EMK 310)

Qualification Undergraduate

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

Module credits 16.00

Programmes [BEng Computer Engineering](#)

[BEng Computer Engineering Engage](#)

[BEng Electrical Engineering](#)

[BEng Electrical Engineering Engage](#)

[BEng Electronic Engineering](#)

[BEng Electronic Engineering Engage](#)

Prerequisites ERS 220 GS, ELI 220 GS, ENE 310/ ENE 310#

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

Language of tuition Module is presented in English

Department Electrical, Electronic and Computer Engineering

Period of presentation Semester 1

Module content

Hardware based introduction to system designing microprocessors. General microprocessor architecture assembly language and limited C embedded code development, with specific focus on a RISC (Microchip PIC 18) and MIPS (Microchip PIC 32) type processor, memory interfacing and address decoding, microprocessor input/output and interfacing, general programming concepts, general microprocessor system design principles, current trends and new processors exposure to development boards and integrated development environments.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.