

## University of Pretoria Yearbook 2016

## 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	ELI 220, ENE 310/ ENE 310#
Contact time	3 lectures per week, 1 practical per week, 1 tutorial per week
Language of tuition	English
Academic organisation	Electrical, Electronic and Com
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.

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