



# University of Pretoria Yearbook 2022

## Digital communication 310 (EDC 310)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a>
<b>Module credits</b>	16.00
<b>NQF Level</b>	07
<b>Programmes</b>	<a href="#">BEng (Computer Engineering)</a> <a href="#">BEng (Computer Engineering) ENGAGE</a>
<b>Prerequisites</b>	ELI 220 GS
<b>Contact time</b>	1 practical per week, 1 tutorial per week, 3 lectures per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Electrical, Electronic and Computer Engineering
<b>Period of presentation</b>	Semester 2

### Module content

In this module, skills are developed which will enable the students to understand the fundamentals of analogue and digital communication systems, analyse existing systems, improve and modify existing services if required, and design and develop new communication equipment and systems that will meet future demands. Topics that are covered in this module are an introduction to digital communication systems, source coding, communication through an additive white Gaussian channel, carrier modulation, single- and multi-carrier communication through a multipath channel, error-correction coding, and multi-user communication.

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