

# University of Pretoria Yearbook 2022

## Wireless sensor networks 732 (EKS 732)

<b>Qualification</b>	Postgraduate
<b>Faculty</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a>
<b>Module credits</b>	32.00
<b>NQF Level</b>	08
<b>Programmes</b>	<a href="#">BEngHons Computer Engineering</a> <a href="#">BEngHons Electronic Engineering</a>
<b>Prerequisites</b>	ERN 780
<b>Contact time</b>	32 contact hours per semester
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Electrical, Electronic and Computer Engineering
<b>Period of presentation</b>	Semester 1 or Semester 2

### Module content

WSN consist of individual nodes interacting with their environment by sensing or controlling physical parameters; these nodes have to collaborate (using wireless communication) to fulfil their tasks. The course can be structured in two parts: architectures covering single node and network architectures, and communication protocols focusing on algorithms and protocols relevant to wireless sensor networks. The latter include the physical layer, MAC protocols, link-layer, naming and addressing, time synchronisation, localisation and positioning, topology control, routing protocols, data-centric and content-based networking, transport layer and QoS, and advanced application support (e.g. security).

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.