

University of Pretoria Yearbook 2016

Wireless sensor networks 732 (EKS 732)

| Qualification | Postgraduate |
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| Faculty | Faculty of Engineering, Built Environment and Information Technology |
| Module credits | 32.00 |
| Programmes | BEngHons Computer Engineering |
| Prerequisites | Computer networks ERN 780 |
| Contact time | 32 contact hours per semester |
| Language of tuition | English |
| Academic organisation | Electrical, Electronic and Com |
| Period of presentation | 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 an QoS, and advanced application support (e.g. security).

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