University of Pretoria Yearbook 2022

Parallel and distributed computing 486 (COS 486)

Qualification	Undergraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	15.00
NQF Level	08
Prerequisites	COS 301 and at least two COS modules at third-year level.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Computer Science
Period of presentation	Semester 1 or Semester 2

Module content

Computational science relies on the analysis of often complex models, for its empirical data and analyses typically involve an enormous amount of calculations. Parallel computing is one means of reducing the time needed to complete such calculations. This module will examine the kinds of problems that lend themselves to parallel computation and the methods for implementing programs to solve such problems. The aim of the module is to provide a background for parallel and distributed computing as well as practical knowledge of the implementation of computational experiments.