

Universiteit van Pretoria Jaarboek 2017

Kunsmatige intelligensie (II) 711 (COS 711)

Kwalifikasie Nagraads

Fakulteit [Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie](#)

Modulekrediete 15.00

Programme [BScHons Rekenaarwetenskap](#)

Voorvereistes Geen voorvereistes.

Kontaktyd 2 lesings per week

Onderrigtaal Module word in Engels aangebied

Akademiese organisasie Rekenaarwetenskap

Aanbiedingstydperk Semester 1 of Semester 2

Module-inhoud

* Hierdie inligting is slegs in Engels beskikbaar.

This module focuses on three Computational Intelligence paradigms, namely Artificial Neural Networks, Artificial Immune Systems, and Fuzzy Systems. Within the Artificial Neural Networks paradigm algorithmic models of neural learning will be studied, including supervised, unsupervised, and reinforcement learning. Aspects that influence the performance of artificial neural networks will be studied in depth. Within the Artificial Immune Systems paradigm algorithm models of different views of the human biological immune system will be studied, including negative selection, clonal selection, network theory and danger theory models. The Fuzzy Systems paradigm include models of reasoning with uncertainty, specifically fuzzy logic and rough sets. Prior knowledge assumed include good programming skills and an undergraduate module in calculus.

Die inligting wat hier verskyn, is onderhewig aan verandering en kan na die publikasie van hierdie inligting gewysig word.. Die [Algemene Regulasies \(G Regulasies\)](#) is op alle fakulteite van die Universiteit van Pretoria van toepassing. Dit word vereis dat elke student volkome vertroud met hierdie regulasies sowel as met die inligting vervat in die [Algemene Reëls](#) sal wees. Onkunde betreffende hierdie regulasies en reëls sal nie as 'n verskoning by oortreding daarvan aangebied kan word nie.