

Universiteit van Pretoria Jaarboek 2017

Stelselsdenke 780 (ISE 780)

Kwalifikasie	Nagraads
Fakulteit	Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie
Modulekrediete	16.00
Programme	BIngHons Tegnologiebestuur BScHons Tegnologiebestuur BScHons Finansiële Ingenieurswese
Diensmodules	Fakulteit Natuur- en Landbouwetenskappe
Voorvereistes	Geen voorvereistes.
Kontaktyd	20 kontakure per semester
Onderrigtaal	Module word in Engels aangebied
Akademieorganisasie	Ingenieurs- en Tegnologiebest
Aanbiedingstydperk	Semester 1 en Semester 2

Module-inhoud

*Hierdie inligting is slegs in Engels beskikbaar.

The modern world is made up of “systems”. This is evident from everyday discussions amongst even the general public. Statements such as “The system failed us”, or “The national energy system is under pressure” abound. Unfortunately, most people have little or no understanding what a system is, or how to deal with it. Digging deeper into the concept of “system” leads one to realise that engineers and scientists without any working knowledge of “systems thinking” cannot succeed when attempting to solve complex problems. The module will equip students with the ability to solve problems from a “whole”, “big picture” or holistic perspective. Students will develop a range of critical skills allowing them to successfully function in a complex world made up of many interrelated systems. The module will also provide students with an overview of systems engineering resulting from systems thinking, including the requisite tools and processes. This module will challenge much about a students’ work environment, but it also will be unlike any other module a student has ever completed, mostly presented independent of any traditional engineering discipline.

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.