

Universiteit van Pretoria Jaarboek 2018

Prosesoptimisering 781 (BMK 781)

Kwalifikasie	Nagraads
Fakulteit	Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie
Modulekrediete	16.00
Voorvereistes	Geen voorvereistes.
Kontaktyd	24 kontakure
Onderrigtaal	Module word in Engels aangebied
Departement	Bedryfs- en Sisteemingenieurswese
Aanbiedingstydperk	Semester 1 of Semester 2

Module-inhoud

*Hierdie inligting is slegs in Engels beskikbaar.

Process optimisation is an engineering discipline which focuses on the tools and techniques used specifically for business process analysis, design, and optimisation. As physics determines the physical behaviour of tangibles, process physics forms the foundation of business process behaviour. Traditionally, operations research techniques are used by Industrial Engineers to optimise business processes, process optimisation provides a more focused approach using techniques such as Social Network Analysis, System Dynamics, image profiling and process mining to uncover analytical models.

The outcome of this course is to enable the student to create an integrated, analytical business process behaviour profile. This supports the analysis, design and optimisation of business processes in a Business Engineering lifecycle. The following topics are covered in the course:

- Standard Process Physics principles, facts and models.
- Process Intelligence
- Adaptive process control and SMART processes
- Robustness and complexity analysis
- Process mining
- Social Network Analysis

Process optimisation requires an understanding of operations research within the business engineer framework. This course requires a full understanding of undergraduate Industrial Engineering modules as well as a postgraduate understanding of resource optimisation and enterprise architecture.

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 vertrouwd met hierdie regulasies sowel as met die inligting vervat in die [Algemene Reëls](#) sal wees.



Onkunde betreffende hierdie regulasies en reels sal nie as 'n verskoning by oortreding daarvan aangebied kan word nie.