

Universiteit van Pretoria Jaarboek 2017

Formele berekeningsaspekte (II) 741 (COS 741)

Kwalifikasie Nagraads

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

Modulekrediete 15.00

Programme [BIT Inligtingtegnologie](#)
[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.

The status of Computer Science, including software science, as a proper “science” is closely related with our ability to construct accurate and precise models of the structures and processes of computational systems. The precision of these models is closely related with our ability to express them in formal notations with mathematical rigour, such that it also becomes possible to reason formally about relevant and interesting properties of these models. Examples of such interesting properties are logical consistency (i.e. absence of inherent contradictions), or safety properties such as deadlock freeness. This module focuses on formal languages and techniques which are suitable for such purposes. Of particular importance are process algebras with which systems of parallel and concurrent computation can be formally described. Other suitable formalisms may be discussed as well, such that the contents of this module may slightly vary from year to year.

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 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 reëls sal nie as ‘n verskoning by oortreding daarvan aangebied kan word nie.