# Universiteit van Pretoria Jaarboek 2017

# Operasionele navorsing 780 (BOZ 780)

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| **Kwalifikasie** | Nagraads |
| **Fakulteit** | Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie |
| **Modulekrediete** | 32.00 |
| **Programme** | BIngHons Bedryfsingenieurswese |
| | BScHons Toegepaste Wetenskap Bedryfstelsels |
| **Voorvereistes** | BAN 313 of BAN 780 |
| **Kontaktyd** | 48 Kontakure |
| **Onderrigtaal** | Module word in Engels aangebied |
| **Akademiese organisasie** | Bedryfs- en Sisteemingenieursw |
| **Aanbiedingstydperk** | Semester 1 of Semester 2 |

**Module-inhoud**

*Hierdie inligting is slegs in Engels beskikbaar.

Building on undergraduate modules in Operations Research, the module aims to extend the mathematical programming and optimisation capabilities by introducing uncertainty. Many decision makers are confronted with complex environments in which data is not known with certainty, or in which the decision constraints are uncertain. For cases where one knows the shape, or can assume that the uncertainty follows a known probabilistic distribution, stochastic programming can be used. In the module both chance-constrained programming and fixed recourse are introduced. Fuzzy optimisation is introduced for cases where the shape and/or distribution of the uncertainty are not known.The module also addresses the uncertainty when a decision maker is confronted with multiple, competing objectives.