

University of Pretoria Yearbook 2018

Introduction to mathematical optimization for big data science 804 (MIT 804)

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| Qualification | Postgraduate |
| Faculty | Faculty of Engineering, Built Environment and Information Technology |
| Module credits | 5.00 |
| Programmes | MIT MIT Big Data Science |
| Prerequisites | First year level higher education modules in Computer Science, Mathematics and Statistics. |
| Contact time | 5 contact hours |
| Language of tuition | Module is presented in English |
| Department | School of Information Technology |
| Period of presentation | Quarter 2 |

Module content

In this module students will be introduced to Mathematical Optimization through gaining knowledge about the theory and algorithms to solve optimisation problems. Topics will include: Linear programming, unconstrained optimization, equality constrained optimization, general linearly and nonlinearly constrained optimization, quadratic programming, global optimization, Theory and algorithms to solve these problems.

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