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

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	5.00
Programmes	MIT Big Data Science (Coursework)
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.