MSC (DATA SCIENCE AND ANALYTICS)

Programme Requirements

Code	Title	Credits
Students take **90** credits as follows - modules to the value of **60** credits in Part 1 and a Dissertation (**30** credits) in Part 2:		
Part 1		
Students take **60** credits as follows - all listed core modules (**30** credits) and **30** credits of elective modules:		
Core Modules [1]		
CS6405	Datamining	5
CS6421	Deep Learning	5
ST6030	Foundations of Statistical Data Analytics	10
ST6033	Generalised Linear Modeling Techniques	5
CS6408	Database Technology [2]	5
or CS6503	Introduction to Relational Databases	
Elective Modules [1]		
Students take modules to the value of **10** credits from the following CS modules:		30
CS6506	Programming in Python (5) [3]	
CS6507	Programming in Python with Applications (5) [3]	
CS6422	Complex Systems Development (5) [3]	
CS6423	Scalable Computing for Data Analytics (5) [3]	
Plus modules to the value of **20** credits, with at least **10** credits of ST (Statistics) modules, from the following:		
CS6322	Optimisation (5)	
CS6409	Information Storage and Retrieval (5)	
CS6420	Topics in Artificial Intelligence (5)	
CS6426	Data Visualization for Analytics Applications (5)	
ST6034	Multivariate Methods for Data Analysis (10)	
ST6035	Operations Research (5)	
ST6036	Stochastic Decision Science (5)	
ST6040	Machine Learning and Statistical Analytics I (5)	
ST6041	Machine Learning and Statistical Analytics II (5)	
Part 2		
Students take **30** credits as follows:		
Core Modules		
CS6500	Dissertation in Data Science and Artificial Intelligence	30
or ST6090	Dissertation in Data Analytics	
Total Credits		**90**

1 All selections are subject to approval of the programme coordinator.

2 Students who have adequate database experience take CS6408. Students who do not have adequate database experience take CS6503

3 Students who have adequate programming experience can take CS6422 and CS6423. Students who do not have adequate programming experience can take CS6506 and CS6507

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.