

## Graduate Diploma in Data Analytics (GDDA)

MMSc students interested in the GDDA, must complete:

MSCI 603	MSCI 623*
MSCI 605	MSCI 718
MSCI 609	MSCI 719
MSCI 607	+ One <i>pre-approved</i> elective

Below is a list of courses, the department has reviewed that have been considered and approved to count towards the Graduate Diploma in Data Analytics. This list is reviewed and updated annually.

If you find a course not listed, you are required to submit the [Management Sciences Pre-Approval Request Form](#) to get it approved *before you enrol* in quest. If it is outside the department you may need to include a course description and a course outline with the form submission for expediency.

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### Within the Department of Management Sciences

These courses are considered acceptable electives towards the GDDA, however due to scheduling and department resources, may not be available when you need them.

#### MSCI

- 630 Human Computer Interaction
- 641 text analytics
- 703 Applied Optimization
- 709 Logistics & Supply Chain Management
- 712 Decision Analysis under Uncertainty
- 734 Network Models and Applications

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### Outside the Department of Management Sciences

Please remember that the MMSc degree requirements allow for only one (1) course to be completed outside the department. If you complete one of the following courses for the GDDA, any additional courses you complete outside Management Sciences will need to be [designated as audit \(AUD\) or extra \(X\)](#).

#### CS

- 631 Data-Intensive Distributed Analytics
- 638 Principles of Data Management and Use
- 648 Database System Implementation
- 680 Introduction to Machine Learning
- 685 Machine Learning: Statistical and Computational Foundations
- 686 Introduction to Artificial Intelligence

#### ECE

- 656 Database Systems
- 608 Quantitative Analysis in Biomedical Eng

\* ECE 657A Data and Knowledge Modelling and Analysis: this course is currently listed as an anti-req for MSCI 623 Big Data Analytics. No longer eligible to replace MSCI 623 in the GDDA requirements.

#### STAT

- 830 Experimental Design
- 831 Generalized Linear Models and Applications
- 840 Computational Inference
- 841 Statistical Learning - Classification
- 842 Data Visualization
- 844 Statistical Learning – Function Estimation
- 845 Statistical Concepts for Data Science
- 847 Exploratory Data Analysis
- 854 Sampling Theory and Practice

#### SYDE

- 631 Time Series Modelling