MMath Coursework (Data Science Specialization)

Students in this specialization can choose 4 elective courses from this list:

- CS 648  Database Systems Implementation
- CS 654  Distributed Systems
- CS 658  Computer Security and Privacy
- CS 680  Introduction to Machine Learning
- CS 685  Machine Learning Theory: Statistical and Computational Foundations
- CS 686  Introduction to Artificial Intelligence
- CS 740  Database Engineering
- CS 741  Parallel and Distributed Database Systems
- CS 743  Principles of Database Management and Use
- CS 786  Probabilistic Inference and Machine Learning
- CS 798  Advanced Research Topics
- CS 848  Advanced Topics in Databases
- CS 856  Advanced Topics in Distributed Computing
- CS 858  Advanced Topics in Cryptography, Security and Privacy
- CS 870  Advanced Topics in Scientific Computing
- CS 886  Advanced Topics in Artificial Intelligence
- STAT 840  Computational Inference
- STAT 841  Statistical Learning: Classification
- STAT 842  Data Visualization
- STAT 844  Statistical Learning: Function estimation
- STAT 946  Topics in Probability and Statistics
- CO 602  Fundamentals of Optimization
- CO 650  Combinatorial Optimization
- CO 663  Convex Optimization and Analysis

Note: CS 798, CS courses at the 800 level, and STAT courses at the 900 level should be on a topic in Data Science; they are subject to the approval of the Graduate Officer.

Other advanced courses are offered within the Faculty of Mathematics on topics of Data Science on a more irregular basis. These courses may be taken with approval of the Graduate Officer and course instructor. Similarly, courses offered outside the Faculty, in Data Science or in some area of its application may be approved by the Graduate Officer and the course instructor.