Data Science (DATA) Courses

DATA 5000 [0.5 credit]
Data Science Seminar
Cloud based distributed systems, statistics, machine learning, use of complex ecosystems of tools and platforms, data ethics, and communication skills to explain advanced analytics. Students choose a project in Big Data management and/or analysis, deliver a paper and give a class presentation on their findings.

DATA 5001 [0.5 credit] (MAT 5818)
Fundamentals in Data Science and Analytics
Ethics in Data Science and Analytics, visualization and knowledge discovery in massive datasets; unsupervised learning: clustering algorithms; dimension reduction; supervised learning: pattern recognition, smoothing techniques, classification.
Precludes additional credit for STAT 5703.

DATA 5002 [0.5 credit]
Data Science, Ethics & Society
The ethical, social, political, and environmental implications of data science including the roles and responsibilities of data scientists in contemporary and emerging technological systems and the impact these systems may have at multiple scales, individual, group, institution, across sectors and nation-states.
Includes: Experiential Learning Activity
Also listed as COMS 5225.
Precludes additional credit for COMS 5225, ITEC 5206.

DATA 5900 [0.5 credit]
Special Topics in Data Science
Special topics, not covered by other graduate courses. Details will be available at the time of registration.

DATA 5908 [1.5 credit]
Project - MSc

DATA 5909 [2.5 credits]
Thesis - MSc

DATA 5918 [1.5 credit]
Project - MIT

DATA 5919 [2.5 credits]
Thesis - MIT

DATA 5928 [1.0 credit]
Project - MEng

DATA 5929 [2.5 credits]
Thesis - MASc

DATA 5939 [2.5 credits]
Thesis - MCS

DATA 6909 [0.0 credit]
Thesis - PhD