

Online Master of Science in Analytics (36 hours)

Curriculum Grid

INTERDISCIPLINARY CORE		
BASIC (9 hours) (all required unless an opt-out waiver is approved)		
CSE 6040: Computing for Data Analysis	ISYE 6501: Intro to Analytics Modeling	MGT 8803/6754: Business Fundamentals for Analytics
ADVANCED (6 hours)		
CSE 6242: Data and Visual Analytics	MGT 6203: Data Analytics in Business	
OPERATIONS RESEARCH AND STATISTICS ELECTIVES (9 hours)		
STATISTICS ELECTIVES (2 courses required)	OPERATIONS RESEARCH ELECTIVES (1 course required)	OPT-OUT ELECTIVES
ISYE 6402: Time Series Analysis ISYE 6414: Regression Analysis ISYE 6420: Bayesian Statistics ISYE 6525: High-Dimensional Data Analytics ISYE 6740: Computational Data Analysis* ISYE 7406: Data Mining and Statistical Learning	ISYE 6644: Simulation ISYE 6650: Probabilistic Models ISYE 6669: Deterministic Optimization	<ul style="list-style-type: none"> Any non-required elective Opt-Out elective does not have to align with the Course Prefix, i.e. CSE, ISYE, MGT
TRACKS AND ELECTIVES (6 hours) (2 courses required from 1 track)		
ANALYTICAL TOOLS	BUSINESS ANALYTICS	COMPUTATIONAL DATA ANALYTICS
CS 7280: Network Science ISYE 6402: Time Series Analysis ISYE 6414: Regression Analysis ISYE 6420: Bayesian Statistics ISYE 6525: High-Dimensional Data Analytics ISYE 6644: Simulation ISYE 6650: Probabilistic Models ISYE 6669: Deterministic Optimization ISYE 6740: Computational Data Analysis * ISYE 7406: Data Mining and Statistical Learning	MGT 6033/8833: Analysis of Unstructured Data <i>(delivered as 7-week course)</i> MGT 6059: Emerging Technologies <i>(delivered as 7-week course)</i> MGT 6311: Digital Marketing MGT 6655: Business Data Preparation & Visualization <i>(delivered as 7-week course)</i> MGT 6727: Privacy for Professionals MGT 8813: Financial Modeling MGT 8823: Data Analysis for Continuous Improvement PUBP 6725: Information Security Policies and Strategies	CS 6400: Database Systems CS 6601: Artificial Intelligence CS 6750: Human Computer Interaction CS 7280: Network Science CS 7637: Knowledge-Based AI CS 7642: Reinforcement Learning CS 7643: Deep Learning CS 7646: Machine Learning for Trading CSE 6250: Big Data in Healthcare CSE 6742: Modeling, Simulation & Military Gaming CSE 8803: Applied Natural Language Processing ISYE 6740: Computational Data Analysis* MGT 6033: Analysis of Unstructured Data <i>(delivered as 7-week course)</i>
PRACTICAL EXPERIENCE (6 hours) (prerequisites include a minimum of 8 courses, including the advanced core prior to enrollment, and a permit)		
CSE/ISYE/MGT 6748: Applied Analytics Practicum		

All courses are 3 credit hours, apart from the 6 credit hour practicum

Courses are subject to change

*Required for the Computational Data Analytics track