

MATHEMATICS WITH DATA ANALYTICS CONCENTRATION

Effective Date: August 2017

Freshman Fall Semester			Freshman Spring Semester		
Course	Course Name	Cr	Course	Course Name	Cr
MTSC-191	University Seminar I (C)	1	MTSC-192	University Seminar II (C)	1
MTSC-251	Calculus I [^] (B/AtC)	4	MTSC-252	Calculus II [^] (AtC)	4
ENGL-101	English Composition I (C)	3	ENGL-102	English Composition II (C)	3
xx-xxx	Foreign Language I (B/AtC)	3	xx-xxx	Foreign Language II (B/AtC)	3
MTSC-241	Elementary Statistics	3	CSCI-225 ^{^^} Or CSCI-120 ^{^^}	Structured Programming for Scientist & Engineers + (AtC), Or Elements of Computer Programming I + (AtC)	3 Or 4
MGMT-100	Introduction to Business	3	ECON 201	Principles of Macroeconomics (AtC)	3
	Total Credits	17		Total Credits	17/18
Sophomore Fall Semester			Sophomore Spring Semester		
Course	Course Name	Cr	Course	Course Name	Cr
MTSC-253	Calculus III	4	MTSC-313	Linear Algebra	3
MTSC-213	Discrete Math (AtC)	3	MTSC-317 Or MTSC-319	Number Theory (S-E/AtC), Or Combinatorics (S-O/AtC)	3
PHYS-211 ^{^^} Or PHYS-201 ^{^^}	Fundamentals of Physics I + (B) Or General Physics I + (B)	4	xx-xxx	Free Elective (Recommend: PHYS 212 or PHYS 202)	3
ENGL-200	Speech (C)	3	ECON-303	Mathematical Economics	3
ECON 202	Microeconomics	3	ECON-308	Statistical Analytics II – Bus/Econ	3
	Total Credits	17		Total Credits	15
Junior Fall Semester			Junior Spring Semester		
Course	Course Name	Cr	Course	Course Name	Cr
MTSC-341	Probability (F)	3	MTSC-491	History of Math (S/AtC)	3
MTSC-351	Differential Equations (F)	3	MTSC-461	Intro to Real Analysis (S)	3
GLOB-395	Global Societies (C)	3	MVSC-101	Fitness and Wellness (C)	2
MGMT-3xx	Introduction to Analytics	3	MIS 470	Database Management System	3
MGMT-305	Management Information Systems	3	MTSC-340	Advanced Analytical Statistics	3
	Total Credits	15		Total Credits	14
Senior Fall Semester			Senior Spring Semester		
Course	Course Name	Cr	Course	Course Name	Cr
MTSC-451	Advanced Calculus I (F)	3	MTSC-452	Advanced Calculus II (S)	3
MTSC-411	Algebraic Structures I (F)	3	BANL-xxx	Data Analytics Capstone* (B)	3
BANL-xxx	Programming for Analytics	3	MTSC-xxx	Math Elective (Recommend MTSC 431)	3
See Gen Ed Breadth Course List	Literature Elective (B/AtC)	3	See Gen Ed Breadth Course List	History Elective (B/AtC)	3
PSYC 201	Introduction to Psychology	3			
	Total Credits	15		Total Credits	12

Total Credits 120

Key Codes:

[^] Students who do not satisfactorily complete MTSC-251 & MTSC-252 may be advised to consider changing to another major.

* Senior Capstone Course

** Mathematics Elective courses can be selected from MTSC-300 or higher level courses, except MTSC- 402 & 403. These courses include MTSC 317 (S/E) or 319 (S/O), 412 (S), 431 (F), 454 (S), 471 (S), or 499, and could occur in the Fall or Spring semester of the Senior year.