## Mathematics Effective Date: August 2014



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 <sup>^</sup> (B/AtC)	4	MTSC-252	Calculus II <sup>^</sup> (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
See Gen Ed	History Elective (B/AtC)	3	CSCI-225^^	Structured Programming for	3
Breadth	•			Scientist & Engineers +	
Course List			Or	(AtC)	Or
				Elements of Computer	
			CSCI-120^^	Programming $I + (AtC)$	4
MVSC-101	Fitness and Wellness (C)	2			
	Total Credits	16		Total Credits	14/15
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	Number Theory (S-E/AtC), or	3
			MTSC-319	Combinatorics (S-O/AtC)	
PHYS-211^^	Fundamentals of Physics I +	4	PHYS-212	Fundamentals of Physics II	4
Or	(B)		Or	++	
PHYS-201^^	General Physics $I + (B)$		PHYS-202	General Physics II ++	
ENGL-200	Speech (C)	3	See Gen Ed	Literature Elective (B/AtC)	3
			Breadth	× /	
			Course List		
XX-XXX	Free Elective	3	XX-XXX	Free Elective	3
	Total Credits	17		Total Credits	16
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	PSYC-201	Intro General Psychology	3
XX-XXX	Free Elective	3	XX-XXX	Free Elective	3
XX-XXX	Free Elective	3	XX-XXX	Free Elective	3
	Total Credits	15		Total Credits	15
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
	Algebraic Structures I (F)	3	MTSC-498	Topics in Mathematics* (B)	3
MTSC-411	Algebraic Structures I (F)			1	
MTSC-411 MTSC-xxx	Mathematics Elective**	3	MTSC-xxx	Mathematics Elective**	3
	5	33	MTSC-xxx xx-xxx	Mathematics Elective** Free Elective	3 3
MTSC-xxx	Mathematics Elective**	3			

Name:	
ID:	
Phone:	
Advisor:	
Minor:	

**Total Credits 120** 

Breadth & AtC Requirements	Course(s)
History (African-American Experience /Multicultural)	
Literature (African-American Experience /Multicultural)	
Social Science	PSYC 201
Arts/Humanities Elective 1 (African-American Experience /Multicultural)	Foreign Language I
Arts/Humanities Elective 2 (African-American Experience /Multicultural)	Foreign Language II
Natural Science w/ Lab	PHYS 211 or PHYS 201
African-American Experience (History/Literature/Art/Free Elective)	
Multicultural 1 (History/Literature/Social Science/Art/Free Elective)	Foreign Language I
Multicultural 2 (History/Literature/Social Science/Art/Free Elective)	Foreign Language II
Reading/Speaking/Listening Across the Curriculum	MTSC 317 or MTSC 319
Self Evaluation	PSYC 201
Wellness	PSYC 201
Information Literacy	MTSC 491
Computer Competency	CSCI 225 or CSCI 120
Writing in Major	MTSC 491
Quantitative Reasoning	MTSC 251 or MTSC 252
Global Issues	MTSC 491
Critical Thinking/Problem Solving Issues	MTSC 213

## 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.

(C) Core Course
(B) Breadth Course
(AtC) Across the Curriculum
(S) Spring Only Course
(F) Fall Only Course
(E) Even Years
(O) Odd Years

^^ It is highly recommended that students either double major or minor in business, computer science or information technology (take CSCI 120), engineering or physics (take PHYS 201), or other science related field to become more employable in industry, education, or the federal government.

It is highly recommended that students take MTSC 203, MTSC 431 or MTSC 471 if they plan to attend graduate school with a BS in Mathematics. Students with advanced degrees (master's degree or doctorate) are more employable in industry, education, or the federal government.

+ This option is based on your chosen minor or double major. See advisor to select an option.

++ If you take PHYS 211, then you must take PHYS 212. If you take PHYS 201, then you must take PHYS 202. You are not permitted to interchange the course sequence.