

Bachelor of Science Degree in Mathematics, Data Science Option

8 Semester Program

Total Hours 120

First Semester (15 hours) Credit Hrs.

CIS	1193	PC Hardware/Software Maintenance	3
ENGL	1013	Composition I.....	3
MATH	2343	Introduction to Statistics.....	3
MATH	1033	Trigonometry (or Gen Ed course if waived by dept exam)	3
		Gen. Ed. Communication Requirement.....	3

Second Semester (17 hours) Credit Hrs.

CIS	2203	Programming Logic & Design	3
CIS	2223	Microcomputer Applications.....	3
ENGL	1023	Composition II.....	3
MATH	2255	Calculus I	5
MATH	2233	Introduction of Math Reasoning (Spring Odd) or Gen. Ed U.S. History or Govt. (Spring Even)	3

Third Semester (15 hours)..... Credit Hrs.

CIS*	3423	COBOL	3
MATH	3495	Calculus II	5
		Gen. Ed. Science Requirement with Lab.....	4
		Gen. Ed. Fine Arts Requirement	3

Fourth Semester (15 hours)..... Credit Hrs.

CIS	3103	Advanced Microcomputer Applications.....	3
MATH	3545	Calculus III.....	5
MATH	2233	Introduction of Math Reasoning (Spring Odd) or Gen. Ed. History or Govt (Spring Even)	3
		Gen. Ed. Science Requirement with lab.....	4

Fifth Semester (15 hours) Credit Hrs.

MATH	3403	Probability & Statistics (fall, odd years) or Math Upper Level Elective (fall, even years).....	3
CIS*	3443	Object Oriented Programming Language.....	3
		Gen. Ed. Humanities Requirement	3
		Gen Ed Social Science Requirement	3
		Elective.....	3

Sixth Semester (15 hours)..... Credit Hrs.

MATH	3463	Linear Algebra (spring, even years) OR	
MATH	4453	Differential Equations (spring, odd years)	3
MATH		Math Upper Level Elective	3
MATH	3513	Discrete Mathematics (spring even years) OR	
C S	3003	Python Programming (spring odd years)	3
CIS	3123	Linux Operating Systems (spring even years).....	3
CIS	3523	System Analysis and Design	3

Seventh Semester (15 hours) Credit Hrs.

MATH	3403	Probability & Statistics (fall, odd years) or Math Upper Level Elective (fall, even years).....	3
MATH		Math Upper Level Elective (fall, even years).....	3
CIS	4623	Database Management Systems	3
		Gen Ed Social Science Requirement	3
		Electives	6

Eighth Semester (13-16 hours)..... Credit Hrs.

MATH	4711	Mathematics Seminar	1
MATH	3463	Linear Algebra (spring, even years) or Math Upper Level Elective (fall, even years).....	3
MATH	4453	Differential Equations (spring, odd years)	3
MATH	3513	Discrete Mathematics (spring even years) OR	
C S	3003	Python Programming (spring odd years)	3
CIS	4503	Data Communications and Networking	3
		Electives as needed to reach 40 hours upper level and 120 hours total.....	3-6

*Other CIS Programming Options exist, such as CIS 3243 Introduction to Java