

**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) <b>OR</b>	
MATH	4453	Differential Equations (spring, odd years) .....	3
MATH		Math Upper Level Elective .....	3
MATH	3513	Discrete Mathematics (spring even years) <b>OR</b>	
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
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	4453	Differential Equations (spring, odd years) .....	3
MATH	3513	Discrete Mathematics (spring even years) <b>OR</b>	
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