

**Bachelor of Science 2023-34 AY****CIS and Mathematics Major****CIP Code: 110101****Major Code CI02****Cr Hrs**

<b>General Education CORE 42 Requirements 42*</b>		<b>35</b>
Area 1A	Social & Behavioral Sciences	6
Area 1B	Civic Engagement	3
Area 2A	Written Communication	6
Area 2B	Oral Communication	3
Area 3A	Natural Science Non-Lab **	3
Area 3B	Natural science With Lab (PHYS 270)	
Area 4	Mathematics (MATH 150)	
Area 5A	Humanities	6
Area 5B	Fine Arts	3
Area 5C	Global Competencies	3
Area 5D	Health and Wellness	2
<b>UE 100</b>	<b>University Experience**</b>	<b>1</b>
<b>CIS Core Requirements</b>		<b>30</b>
CIS 110	Programming I	3
CIS 202	Information Systems I	3
CIS 210	Programming II	3
CIS 308	Website Administration I	3
CIS 310	Database Management Systems I	3
CIS 315	Computer Networks	3
CIS 340	Website Administration II	3
CIS 350	Data Structures	3
CIS 410	Information Systems II	3
CIS 425	Database Management Systems II	3
<b>Mathematics Requirements</b>		<b>34</b>
MATH 150	Calculus with Analytic Geometry I*	5
MATH 250	Calculus with Analytic Geometry II	4
MATH 260	Calculus with Analytic Geometry III	4
MATH 300	Fundamentals of Mathematical Thought	3
MATH 340	Discrete Mathematics	3
MATH 350	Introduction to Numerical Analysis	3
MATH 351	Linear Algebra	3
MATH 361	Probability and Statistics I	3
MATH 371	Introduction to Operations Research	3
MATH 421	Introduction to Advanced Calculus	3
<b>Math Supporting Requirements Choose one:</b>		<b>4-5</b>
CHEM 140/141	General Chemistry w/lab (5)	
PHYS 160	Elementary College Physics (4)	
PHYS 270	General Physics I (4)	
<b>CIS Supporting Requirements</b>		<b>6</b>
CIS 240	Python Programming	3
Cis 390	Introduction to Big Data Analytics	3
<b>Electives</b>		<b>9-10</b>
<b>Total Hours</b>	Must include at 39 upper division (300-400) hrs	<b>120</b>

Same program as the Bachelor of Science in Mathematics; Computational Mathematics option. Students selecting this option will graduate with a double major in Computer Information Science and Mathematics.

\* Gen. Ed. Core 42 requirements Area 4 met by required MATH, Area 3A and 3B met by CHEM 140 and PHYS

\*\* Natural Science Non-Lab - not PHYS prefix with the exception of Astronomy