Computer Science B.A. (Students with Precalculus)
The Computer Science B.A. provides students with the fundamentals of computer programming and the the theoretical knowledge of designing and analyzing algorithms to solve programs. Principal areas of study within this degree include programming languages, artificial intelligence, database systems, operating systems, and machine learning.

Essential Skills:
Essential skills refer to the knowledge gained from a liberal arts education. They provide a framework to guide students' progress toward their degree, but also prepare students for a broad range of career paths. A recent survey from the Association of American Colleges and Universities (AAC&U) shows employers "strongly agree" that "regardless of a student's field of study" liberal arts skills best prepare students to enter the job market in their career of choice.

1. Critical Thinking:
      a. Make decisions and solve problems using sound, inclusive reasoning and judgment.
2. Equity & Inclusion
      a. Demonstrate the awareness, attitude, knowledge, and skills required to equitably engage and
         include people from different local and global cultures.
      b. Advocate for inclusion, equitable practices, justice, and empowerment for historically
         marginalized communities.
3. Information Literacy:
      a. Gather and analyze information from a diverse set of sources and individuals to fully
         understand a problem.
      b. Manipulate information, construct ideas, and use technology to achieve specific goals.
4. Inquiry and Analysis:
      a. Accurately summarize and interpret information with an awareness of personal biases that
         may impact outcomes.
      b. Identify appropriate technology for completing specific tasks.
5. Written and Oral Communication:
      a. Understand the importance of and demonstrate verbal, written, and non-verbal/body
         language, abilities.
      b. Communicate in a clear and organized manner so that others can effectively understand.

Employment Information
Representative Job Titles Related to this Major Include:
Software Developer, Web Developer, IT Project Manager, Information Security Analyst, Programmer Analyst, Data Scientist, Database Administrators, and many more.

Representative Employers to the Major Include:
CIS graduates can work in most industries including information technology, finance, government, healthcare, insurance, education, manufacturing, and telecommunications.

FIRST YEAR				
Fall Courses		**Spring Courses**		
FST 1000	1	CSC 2430	3	
CSC 1030/CIS 1120	3	MAT 2220	4	
MAT 2210	4	MAT 1150A	3	
CSC 1200	3	MODERN LANG GEN ED	3	
ENG 1100 GEN ED	3	CSC 2350	3	
Total Credits	14	Total Credits	16	

SECOND YEAR				
Fall Courses		**Spring Courses**		
CSC 2440	4	CIS/CSC ELECTIVE	3	
ART/MUS/COM GEN ED	3	MAT 2320	3	
CSC 2240	3	CSC 2310	3	
CSC 2290	3	ART/MUS/COM GEN ED	3	
PED GEN ED	1	LITERATURE GEN ED	3	
Total Credits	14	Total Credits	15	

THIRD YEAR				
Fall Courses		**Spring Courses**		
TRS GEN ED	3	HIS/POL/PSY/SOC GEN ED	3	
CSC [3300 or 3370 or 3520]	3	CORE GEN ED	4	
ETH GEN ED	3	CSC [3300 or 3370 or 3520]	3	
CSC [3600 or 3700 or 3690]	3	CSC [3600 or 3700 or 3690]	3	
HIS/POL/PSY/SOC GEN ED	3	PHI/MAT 3240 FOR GEN ED	3	
Total Credits	15	Total Credits	16	

FOURTH YEAR				
Fall Courses		**Spring Courses**		
CSC 4600	3	CSC 4900	3	
MAT ELECTIVE (for MAT MINOR)/ ELECTIVE	3	ELECTIVES	12	
HIS/POL/PSY/SOC GEN ED	3			
SCIENCE GEN ED	3			
ELECTIVE	3			
Total Credits	15	Total Credits	15	
		Total Credits to Graduate	120	

Further Resources:
See the following resources: National Association of Colleges & Employers: Career Readiness Defined, AAC&U, What Can I Do with This Major?, and Molloy Undergraduate Catalog.

Notice:
This 8-semester plan is not a contract, either expressed or implied, between the University and the student, but represents a flexible program of the current curriculum which may be altered periodically to carry out the academic objectives of the University. The University specifically reserves the right to change, delete or add to any 8-semester plan at any time within the student's period of study at the University.