

B.S. in Computer Science-Mathematics

Degree Requirements (120 credits)

(Revised Spring'18)

For Students matriculating on or after Fall 2018

General Education Requirements (42 credits)

Credits

Required Common Core	12
Flexible Common Core	18
College Options	12

See Attachment for Recommended and suggested courses in this category.

Pre-Computer Science Sequence (4 credits)

CSC 126	Introduction to Computer Science	4
---------	----------------------------------	---

Note: A grade of C or above in CSC 126 is required to be admitted to the Computer Science-Mathematics Baccalaureate program. Students will be allowed to repeat the course if necessary.

Pre-Major Requirements (26-26 credits)¹ (should be completed prior to their junior year.)

MTH 229	Calculus Computer Laboratory	1
MTH 231	Analytic Geometry and Calculus I	3
MTH 232	Analytic Geometry and Calculus II	3
MTH 233	Analytic Geometry and Calculus III	3
Total		10 credits

OR

MTH 229	Calculus Computer Laboratory	1
MTH 230	Calculus I with Pre-Calculus	6
MTH 232	Analytic Geometry and Calculus II	3
MTH 233	Analytic Geometry and Calculus III	3
Total		13 credits

AND

CSC 220	Computers & Programming	4
CSC 211	Intermediate Programming	4
Total		8 credits

AND

Two courses with laboratories chosen from one of the following sequences:		8
BIO 170-171, 180-181	General Biology I and II with laboratories	
CHM 141-121, 142-127	General Chemistry I and II with laboratories	
PHY 120-121, 160-161	General Physics I and II with laboratories	
GEO 100-101, 102-103	Physical and Historical Geology with laboratories	
AST 120-160	Space Science I and II with laboratories	

1. Courses used to fill Pre-Major requirements can be used to fulfill Gen-Ed requirements.

B.S. in Computer Science-Mathematics**Degree Requirements (120 credits)**

(Revised Spring'18)

For Students matriculating on or after Fall 2018

Major Requirements (52 credits)		Credits
MTH/CSC 228	Discrete Mathematical Structures	4
<u>Computer Science: (24 credits)</u>		
CSC 326	Information Structures	4
CSC 330	Systems Programming; Concepts of Software Design	4
CSC 346	Switching and Automata Theory	4
CSC 382	Analysis of Algorithms	4
<u>Any two 400 level CS advanced electives</u>		8
		Total 24 credits
<u>Mathematics: (24 credits)</u>		
MTH 301	Introduction to Mathematical Proof	4
MTH 311	Probability Theory and an Introduction to Mathematical Statistics	4
MTH 335	Numerical Analysis	4
MTH 338	Linear Algebra	4
<u>Any two of the following Mathematics courses</u>		8
MTH 330	Applied Mathematical Analysis I	4
MTH 337	Applied Combinatorics and Graph Theory	4
MTH 339	Abstract Algebra I	4
MTH 341	Advanced Calculus I	4
MTH 347	Number Theory	4
MTH 349	Cryptology	4
MTH 350	Mathematical Logic	4
MTH 370	Operations Research	4
MTH 410	Mathematical Statistics I	4
<u>Electives (0-10 credits)</u>		See the 8 semester Sample Schedule
<u>Total (120 credits)</u>		