



2026-2027

COMPUTER SCIENCE MATHEMATICS MAJOR, B.A.

Mathematics & Computer Science Department; Shaw School of Sciences

Students must complete all Foundations requirements and major requirements, as well as any additional General Electives needed to reach the minimum of 124 total credits required for a Bachelor's degree.

MAJOR REQUIREMENTS (69-71)

(45 Core + 24-26 Concentration)

__ 4	CSC	121	Computer Programming I	__ Lab
__ 4	CSC	122	Computer Programming II	__ Lab
__ 3	CSC	210	Programming in Python	
__ 3	CSC	231	Computer Organization	
__ 3	CSC	300	Data Structures & Algorithms	
__ 3	CSC	320	Operating Systems	
__ 3	CSC	330	Programming Languages	
__ 3	CSC	400	Parallel & Distributed Systems Programming	
__ 3	CSC	410	Artificial Intelligence	
__ 3	MAT	152	Discrete Math	
__ 1	MAT	170	Intro to Math Modeling	
__ 4	MAT	181	Calculus I	__ Lab
__ 4	MAT	182	Calculus II	__ Lab
__ 3	MAT	271	Linear Algebra	
__ 1	MAT	475	Senior Seminar	

REQUIRED CONCENTRATION (choose one):

CSMC - COMPUTATIONAL MATH (26)

__ 4	MAT	183	Calculus III	__ Lab
__ 3	MAT	241	Introduction to Proofs	
__ 3	MAT	252	Diff Equations/Modeling	
__ 3	MAT	350	Mathematical Modeling	
__ 3	MAT	442	Numerical Analysis	
__ 5	PHY	211	General Physics I	__ Lab __ Recitation
__ 5	PHY	212	General Physics II	__ Lab __ Recitation

CSME - ENGINEERING MATH (24)

__ 3	CSC	115	Web Programming	
__ 3	CSC	310	Software Design & Engineering	
__ 4	MAT	183	Calculus III	__ Lab
__ 3	MAT	241	Introduction to Proofs	
__ 3	MAT	252	Diff Equations/Modeling	
__ 3	MAT	350	Mathematical Modeling	
__ 5	PHY	211	General Physics I	__ Lab __ Recitation

Plus FOUNDATIONS REQUIREMENTS (49)

(3 credits Math and 4 credits Science satisfied by required major courses.)

Plus GENERAL ELECTIVES needed to reach minimum 124 credits (4-6)