

COMPUTER SCIENCE (BA)

Program Requirements

Code	Title	Hours
Lower Division		
CPSC 121	Computer Science I	3
CPSC 122	Computer Science II	3
CPSC 223	Algorithm and Abstract Data Structures	3
CPSC 224	Software Development	3
CPSC 260	Computer Organization	3
Select one of the following:		3-4
MATH 148	Survey of Calculus	
MATH 157	Calculus and Analytic Geometry I	
MATH 231	Discrete Structures	3
Upper Division		
CPSC 321	Database Management Systems	3
CPSC 328	Computer Networks	3
CPSC 391	Software Engineering and Ethics	3
CPSC 450	Design and Analysis of Computer Algorithms	3
CPSC 491	Software Engineering	2
CPSC 492	Senior Design Project II	3
CPSC Technical Electives ²		12
Select one Software Development course:		3
CPSC 331	UI/UX Design	
CPSC 332	Web Development	
CPSC 333	Mobile App Development	
CPSC 334	Linux and DevOps	
Select one Software Systems course:		3
CPSC 326	Organization of Program Languages	
CPSC 341	Internet of Things	
CPSC 346	Operating Systems	
CPSC 482	Data Intensive Systems	
CPSC 483	Data Science Capstone	
Select one Data Science and Machine Learning course		3
CPSC 222	Introduction to Data Science	
CPSC 322	Data Science Algorithms	
CPSC 323	Machine Learning and Intelligent Systems	
CPSC 482	Data Intensive Systems	
CPSC 483	Data Science Capstone	
Select one Leadership-Management course:		3
BENT 490	Creativity, Innovation, and Entrepreneurship	
COMM 401	Communication and Leadership	
ENGM 310	Systems Engineering Management	
ENGM 405	Engineering Project Management	
Total Hours		62-63

¹ CPSC 2XX, 3XX, 4XX (except 497), CPEN 442 Introduction to Robotics, CPEN 430 Digital System Design/ CPEN 430L Digital System Design Lab, or EENG 410 Information Theory and Coding.

² CPSC 2xx, 3xx, 4xx (except 497), CPEN 442, 430/L, or EENG 410.