



Computer Science BS Degree Checklist

Required CS Courses – 39 credits	Credits	Grade	Semester Completed
56.120 Computer Ethics	1		
56.121 Object-Oriented Programming with Java	4		
56.122 Graphical User Interfaces in Java	4		
56.221 Advanced Java	4		
56.240 Embedded Systems Languages	3		
56.255 Data Structures using C++	4		
56.330 Computer Organization	3		
56.350 Organization of Programming Languages	3		
56.355 Analysis of Algorithms and Data Structures	3		
56.357 Principles of Database Design	3		
56.386 Operating Systems	3		
56.480 Object-Oriented Software Engineering	4		

Required Mathematics Courses – 15 credits	Credits	Grade	Semester Completed
53.125 Calculus I	3		
53.126 Calculus II	3		
53.185 Discrete Mathematics	3		
53.141 Introduction to Statistics or 53.241 Probability and Statistics	3		
Math course numbered 200 or higher	3		

Computer Science Electives – 9 credits (at most 3 credits from internship)	Credits	Grade	Semester Completed
56.323 Artificial Intelligence	3		
56.348 Data Mining	3		
56.356 Windows Programming	3		
56.373 Numerical Methods	3		
56.375 Local Area Networks	3		
56.410 Computer Graphics	3		
56.430 Computer Architecture	3		
56.456 Theory of Computation	3		
56.457 Database Design II	3		
56.461 Internet Programming	3		
56.491 Special Topics in Computer Science	3		
56.497 Internship in Computer Science (2-12)			



Mathematics and Science electives - 15 credits		Credits	Grade	Semester Completed
At least 12 credits of science from 2 departments, and at least 3 additional credits of either science or math. Only approved science courses will satisfy these requirements.				
2 Semester Science Laboratory Sequence	1. 2.			
Additional Science course				
Additional Science course (if needed)				
Math (53.200 or higher) or Science course (if needed)				

General Education Requirements		Credits	Grade	Semester Completed
Communication 9 credits	20.101 English Composition I 09.231 Technical Writing 25.103 Public Speaking			
Quantitative and Analytical Reasoning - 3 credits	53.185 Discrete Math	M		
Values 3 credits				
HPE 2 credits				
Group A 12 credits 3 departments	25.103 Public Speaking	M		
Group B 12 credits 3 departments				
Group C 12 credits 3 departments	53.125 Calculus I	M		
	53.126 Calculus II	M		
	Science Lab 1	M		
	Science Elective	M		

Diversity (6 credits, 2 departments)	Credits	Grade	Semester Completed

Free electives (as needed to complete 120 credits)	Credits	Grade	Semester Completed