COMPUTER SCIENCE - ARTIFICIAL INTELLIGENCE EMPHASIS REQUIREMENTS (BA/BS)

Code	Title	Units
Major Requirements [1]		
Computer Science Core:		
COMPSCI 172	INTRODUCTION TO JAVA	3
or COMPSCI 174	INTRODUCTION TO C++	
COMPSCI 220	INTERMEDIATE JAVA	3
or COMPSCI 221	INTERMEDIATE PROGRAMMING IN C#	
or COMPSCI 222	INTERMEDIATE C++	
COMPSCI 223	DATA STRUCTURES	3
COMPSCI 271	COMPUTER ORGANIZATION AND ASSEMBLY PROGRAMMING	3
COMPSCI 364	CLOUD SOFTWARE DEVELOPMENT	3
COMPSCI 366	DATABASE MANAGEMENT SYSTEMS	3
COMPSCI 434	THEORY OF COMPUTATION	3
or COMPSCI 433	THEORY OF ALGORITHMS	
COMPSCI 476	SOFTWARE ENGINEERING	3
Artificial Intelligence Core:		
COMPSCI 332	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	3
COMPSCI 432	INTRODUCTION TO MACHINE LEARNING	3
COMPSCI 437	NATURAL LANGUAGE PROCESSING AND LARGE LANGUAGE MODELING	3
Artificial Intelligence Technical Electives:		
Select 6 units out of the list:		6
COMPSCI 312	INTERMEDIATE DATA SCIENCE	
or BIOLOGY 312	INTERMEDIATE DATA SCIENCE	
COMPSCI 454	MACHINE LEARNING FOR CYBERSECURITY	
COMPSCI 736	IMAGE PROCESSING AND COMPUTER VISION	
COMPSCI 767	BIG DATA AND DATA MINING	
COMPSCI 768	DEEP LEARNING	
Artificial Intelligence Breadth:		
Select 3 units out of the list:		3
PSYCH 303	LEARNING AND CONDITIONING	
PSYCH 351	COGNITIVE PSYCHOLOGY	
Select 3 units out of the list:		3
LIBST 350	TECHNOLOGY AND SOCIAL RESPONSIBILITY	
PHILSPHY 245	CONTEMPORARY MORAL ISSUES	
PHILSPHY 251	LOGIC	
ENGLISH 281	INTRODUCTION TO LANGUAGE STUDY	
PWP 310	THE GRAMMAR OF STANDARD WRITTEN ENGLISH	
Computer Science and Mathematics Electives:		**6**
MATH 255	CALCULUS AND ANALYTIC GEOMETRY III	
Any undergraduate COMPSCI courses numbered 300 or higher		
Any graduate COMPSCI courses numbered 700 or higher [2]		
Total Units		**51**

[1] An approved minor is not required for this major. However, students in this major may be able to add a minor in Mathematics by completing 4 to 7 additional units of mathematics courses. Consult your advisor or the Department of Mathematics for more information.

[2] Graduate courses (500+) may have additional requirements prior to enrollment by undergraduate students. See the Seniors Taking Graduate Courses Policy for further information. Undergraduate students taking graduate courses are not generally permitted to enroll in COMPSCI 789, COMPSCI 793, COMPSCI 798, or COMPSCI 799.

Code	Title	Units
Unique Requirement		
MATH 253	CALCULUS AND ANALYTIC GEOMETRY I	5
MATH 254	CALCULUS AND ANALYTIC GEOMETRY II	4
MATH 280	DISCRETE MATHEMATICS	3
or COMPSCI 215	DISCRETE STRUCTURES	
MATH 355	MATRICES AND LINEAR ALGEBRA	3
STAT 342	APPLIED STATISTICS	3
ENGLISH 370	ADVANCED COMPOSITION	3
or PWP 371	WRITING IN THE SCIENCES	
or PWP 372	TECHNICAL AND PROFESSIONAL WRITING	
PSYCH 211	INTRODUCTORY PSYCHOLOGY	3