COMPUTER SCIENCE, LIBERAL ARTS EMPHASIS, MINOR

Liberal Arts (Code 170-401)

Code	Title	Credits
Twenty-four semester credits, including:		
CS 145	Programming for New Programmers	4
or CS 148	Programming for Experienced Programmers	
CS 245	Advanced Programming and Data Structures	4
CS 252	Computer Systems	4
CS 260	Database Systems	4
Nine credits selected from:		9
CS 268	Web Systems	
CS 335	Algorithms	
CS 370	Computer Security	
CS 376	Cryptography and Network Security	
CS 388	UNIX Systems Programming	
CS 399	Independent Study - Juniors	
CS 420	Artificial Intelligence	
CS 425	Machine Learning	
CS 426	Deep Learning	
CS 436	Mobile Software Development	
CS 450	Theory of Computation	
CS 455	Computer Graphics	
CS 462	Computer Networks	
CS 491	Special Topics	
CS 498	Computer Science Internship	
or other courses designated by the department and not already included in the minor.		

Program Learning Outcomes

Students completing this program will be expected to meet the following learning outcomes:

- Analyze a problem, identify and define the computing requirements appropriate to its solution and demonstrate comprehension of the tradeoffs involved in design choices.
- Apply and use concepts from computer architecture and operating systems in computing system design, implementation and performance analysis.
- Use and evaluate a wide variety of modern tools and languages used in the practical construction of computing systems.