

Computer Science Minor

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About

The Department of Computing Sciences seeks to provide outstanding education, to advance scholarship, and to engage in activities that benefit society as a whole, in accordance to the University mission. The Department aims to equip students with a solid foundation in computing theory, and to prepare them for lifelong independent learning and innovative thinking in a constantly changing discipline. Its faculty members strive to maintain professional currency, and to involve students and colleagues in their research investigations. These endeavors support the University mission to transmit, pursue, and discover knowledge in an atmosphere of collegiality in the university community. Supported by a liberal arts education, the Department seeks to develop the total person, sensitive to social and ethical concerns affected by the computing discipline, and committed to addressing the needs of a diverse and interconnected modern society.

Program: [Computing Sciences](#)
Type: Minor

MINOR: Computer Science (25 credits)

The computer science minor consists of 8 courses from the requirements for the computer science major. The minor provides a strong foundation in computer science suitable for application to any other major field of endeavor.

Required Courses:

Item #	Title	Credits:
	CSC 1051 or ECE 1620	3-4
	CSC 1052 or ECE 2620	4
	CSC 1300 or MAT 2600	3
CSC 1700	Analysis of Algorithms	3
	CSC 2400, ECE 2042, or ECE 2430	3
CSC 4480	Principles of Database Systems	3
	Computer Science Electives for Minor	6

Category Descriptions

CSC 1051 or ECE 1620

Credits: 3-4

Select 1 class from these options.

Item #	Title	Credits:
CSC 1051	Algorithms & Data Struct I	4
ECE 1620	Egr Prog & Applic	3

CSC 1052 or ECE 2620

Credits: 4

Select 1 class from these options.

Item #	Title	Credits:
CSC 1052	Algorithms & Data Struct II	4
ECE 2620	C++, Algorithms & Data Struct	4

CSC 1300 or MAT 2600

Credits: 3

Select 1 class from these options.

Item #	Title	Credits:
CSC 1300	Discrete Structures	3
MAT 2600	Foundation of Math I	3

CSC 2400, ECE 2042, or ECE 2430

Credits: 3

Select 1 class from these options.

Item #	Title	Credits:
CSC 2400	Computer Systems I	3
ECE 2042	Fundamentals of CPE I	3
ECE 2430	Embedded Systems I	3

Computer Science Electives for Minor

Credits: 6

Select 2 Classes from the list below.

- Note: Students can choose either CSC 4900 or ECE 4470 as an elective. Both may not be counted toward the minor.

Item #	Title	Credits:
CSC 1600	Operating Systems	3
CSC 1800	Organ of Prog Languages	3
CSC 2053	Platform Based Computing	3
CSC 2405	Computer Systems II	3
CSC 3010	Overview of Cybersecurity	3
CSC 3080	Info Security & Protection	3
CSC 3150	Game Development	3
CSC 3300	Linear Algebra for Computing	4
CSC 3400	Information Retrieval	3
CSC 3990	Computing Research Topics	3
CSC 4140	Theory of Information	3
CSC 4170	Theory of Computation	3
CSC 4181	Compiler Construction	3
CSC 4280	Parallel Algs & Architecture	3
CSC 4300	Computer Graphics	3
CSC 4380	Info Visualization	3
CSC 4450	Digital Forensics	3
CSC 4490	Data Warehousing & Mining	3
CSC 4500	Artificial Intelligence	3
CSC 4510	Machine Learn&Theory&Evolution	3
CSC 4550	Computing for Data Science	3
CSC 4598	Machine Translation	3
CSC 4600	Distributed Processing	3
CSC 4630	Software Dev and Systems	3
CSC 4700	Software Engineering	3
CSC 4730	Human Computer Interaction	3
CSC 4800	Web Application Development	3
CSC 4810	Mobile App Development	3
CSC 4900	Networks and Security	3
CSC 5900	Seminar in Computing	3
CSC 5920	Logic	3
CSC 5930	Topics Computer Science	3
CSC 5993	Independent Study	3
ECE 4470	Computer Networks	4
PHI 2180	Computer Ethics	3