

DEGREE REQUIREMENTS FOR INTERDISCIPLINARY COMPUTING (as of FALL 2025)

Updated September 2025

Name _____ Class of _____ CPSC GPA _____ (from Transcript)

Computer Science Core Requirements			Coordinate Courses - need 6 to 7 courses in the coordinate discipline to be chosen in consultation with the coordinate advisor.					
Sem	Grade	Course	Sem	Grade	Course	Sem	Grade	Course
_____	_____	CPSC 115L Introduction to Computer Science	_____	_____	_____	_____	_____	_____
_____	_____	CPSC 215L Data Structures and Algorithms	_____	_____	_____	_____	_____	_____
_____	_____	CPSC 203 Math Found. of Computing	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
Cognate Requirements								
<i>For students coordinating with a discipline in the natural and social sciences:</i>								
Sem	Grade	Course						
_____	_____	MATH 131 Calculus I						
and one additional numeric or symbolic reasoning course from the following list: (if MATH, must be 107 or higher)								
_____	_____	POLS 242 Political Science Research Methods						
_____	_____	PSYC 221L Research Design and Analysis						
_____	_____	SOCL 201L Research Methods in the Soc. Sciences						
_____	_____	MATH _____						
 <i>For students coordinating with a discipline in the arts and humanities:</i>								
_____	_____	MATH 127 Functions, Graphs & Modeling	OR	Eligibility to enroll in MATH 131 (additional mathematics courses are to be specified in a study plan)				
Computer Science Electives - need 3 courses appropriate to the coordinate discipline, to be chosen in consultation with the computer science advisor								
Sem	Grade	Course	Sem	Grade	Course			
_____	_____	CPSC 110 Essentials of Computing with Python	_____	_____	CPSC 340 Principles of Software Engineering			
_____	_____	CPSC 219 Theory of Computation	_____	_____	CPSC 352 Artificial Intelligence			
_____	_____	CPSC 225 Topics in Application Programming	_____	_____	CPSC 372 Database Fundamentals			
_____	_____	CPSC 275L Introduction to Computer Systems	_____	_____	CPSC 375 High-Performance Computing			
_____	_____	CPSC 304 Computer Graphics	_____	_____	CPSC 360 Deep Learning			
_____	_____	CPSC 310 Software Design	_____	_____	CPSC 385 Computer Security			
_____	_____	CPSC 315 Systems Software	_____	_____	CPSC 395 Sensitive Information in a Connected World			
_____	_____	CPSC 316 Foundations of Programming Languages	_____	_____	CPSC 415 Special Topics in Computing			
_____	_____	CPSC 320 Analysis of Algorithms						
_____	_____	CPSC 333 Computer Networks						
Senior Exercise (Seminar + Project)			Sem	Grade	Course	Sem	Grade	Course
			_____	_____	CPSC 403	_____	_____	CPSC 498
			_____	_____	CPSC 404	_____	_____	CPSC 499
Students must register for all four seperately. They also receive seperate grades.								

Interdisciplinary Computing

Recommended Course Load

FALL

SPRING

1st year

Freshman Seminar
 CPSC 115L Introduction to Computer Science

CPSC 215L Data Structures and Algorithms
 CPSC 203 Math Found. of Computing

2nd year

Cognate Course 1
 Coordinate Course 1

Cognate Course 2
 Coordinate Course 2

3rd year

Coordinate Course 3
 Coordinate Course 4

CS Elective 1
 Coordinate Course 5

4th year

CPSC 403 Senior Seminar
 CPSC 498 Senior Project
 CS Elective 2
 Coordinate Course 6

CPSC 404 Senior Seminar
 CPSC 499 Senior Project
 CS Elective 3
 Coordinate Course 7

Interdisciplinary Computing with Economics

Updated September 2025

Computing technology and concepts have become increasingly important in all areas of economics and finance, from analysis to security to modeling and visualization. Study in this area might also focus on some of the economic impacts of computing in areas such as online media or intellectual property law. A course of study in this area would draw on computer science electives, mathematics, and coordinate Courses.

The degree requirements for Interdisciplinary Computing with Economics is laid out in the chart below.

Computer Science Core Requirements				Economics Coordinate Courses														
Sem	Grade	Course		Sem	Grade	Course		Sem	Grade	Course								
_____	_____	CPSC 115L	Introduction to Computer Science	_____	_____	ECON 101	Basic Economic Principles	_____	_____	ECON 2xx	200-level Economics Course							
_____	_____	CPSC 215L	Data Structures and Algorithms	_____	_____	ECON 301	Microeconomic Theory	_____	_____	ECON 3xx	300-level Economics Course							
_____	_____	CPSC 203	Math Found. of Computing	_____	_____	ECON 302	Macroeconomic Theory	_____	_____	ECON 431	Economics Senior Seminar							
_____	_____			_____	_____	ECON 318	Basic Econometrics											
Cognate Requirements																		
Sem	Grade	Course																
_____	_____	MATH 131	Calculus I															
_____	_____	MATH 207	Statistical Data Analysis	OR	_____	_____	ECON 218	Intro to Stats for Econ										
Computer Science Electives (need 3 courses appropriate to the coordinate discipline, to be chosen in consultation with the computer science advisor)																		
The recommended electives for an Economics coordinate are flagged with an *.																		
Sem	Grade	Course		Sem	Grade	Course												
_____	_____	CPSC 110	Essentials of Computing with Python	_____	_____	CPSC 340*	Principles of Software Engineering											
_____	_____	CPSC 219	Theory of Computation	_____	_____	CPSC 352	Artificial Intelligence											
_____	_____	CPSC 225	Topics in Application Programming	_____	_____	CPSC 372	Database Fundamentals											
_____	_____	CPSC 275L	Introduction to Computer Systems	_____	_____	CPSC 375	High-Performance Computing											
_____	_____	CPSC 304	Computer Graphics	_____	_____	CPSC 360	Deep Learning											
_____	_____	CPSC 310*	Software Design	_____	_____	CPSC 385*	Computer Security											
_____	_____	CPSC 315	Systems Software	_____	_____	CPSC 395	Sensitive Information in a Connected World											
_____	_____	CPSC 316	Foundations of Programming Languages	_____	_____	CPSC 415	Special Topics in Computing											
_____	_____	CPSC 320*	Analysis of Algorithms															
_____	_____	CPSC 333*	Computer Networks															
Senior Exercise (Seminar + Project)				Sem	Grade	Course		Sem	Grade	Course								
				_____	_____	CPSC 403		_____	_____	CPSC 498								
				_____	_____	CPSC 404		_____	_____	CPSC 499								
Students must register for all four seperately. They also receive seperate grades.																		

Note that students must earn a minimum grade of C- in CPSC 115L, CPSC 203, and CPSC 215L, a minimum grade of B- in ECON 101, and a minimum grade of C+ in MATH 207/ECON 218, ECON 301, and ECON 302.

Interdisciplinary Computing with Economics

Recommended Course Load

FALL

SPRING

1st year

First Year Seminar
 CPSC 115L Introduction to Computer Science
 ECON 101 Basic Economic Principles

CPSC 215L Data Structures and Algorithms
 MATH 207 Statistical Data Analysis **OR**
 ECON 218 Intro to Stats for Econ
 ECON 2xx 200-level Economics course

2nd year

CS Elective 1
 ECON 301 Microeconomic Theory
 MATH 131 Calculus I

CPSC 203 Math Found. of Computing
 ECON 302 Macroeconomic Theory

3rd year

CS Elective 2
 ECON 318 Basic Econometrics

CS Elective 3
 ECON 3xx 300-level Economics course

4th year

CPSC 403 Senior Seminar
 CPSC 498 Senior Project
 ECON 331 Economics Senior Seminar

CPSC 404 Senior Seminar
 CPSC 499 Senior Project

