

DEGREE REQUIREMENTS FOR INTERDISCIPLINARY COMPUTING (as of FALL 2011)

Updated March 2022

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

Cognate Requirements
For students coordinating with a discipline in the natural and social sciences:

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 _____

For students coordinating with a discipline in the arts and humanities:

_____	_____	MATH 127 Functions, Graphs & Modeling	OR	Eligibility to enroll in MATH 131 (additional mathematics courses are to be specified in a study plan)
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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 Computers, Information, and Society	_____	_____	CPSC 340 Principles of Software Engineering
_____	_____	CPSC 110 Visual Computing	_____	_____	CPSC 352 Artificial Intelligence
_____	_____	CPSC 110 Computing with Mobile Phones	_____	_____	CPSC 372 Database Fundamentals
_____	_____	CPSC 219 Theory of Computation	_____	_____	CPSC 375 High-Performance Computing
_____	_____	CPSC 225 Topics in Application Programming	_____	_____	CPSC 360 Deep Learning
_____	_____	CPSC 275L Introduction to Computer Systems	_____	_____	CPSC 385 Computer Security
_____	_____	CPSC 304 Computer Graphics	_____	_____	CPSC 395 Sensitive Information in a Connected World
_____	_____	CPSC 310 Software Design	_____	_____	CPSC 415 Special Topics in Computing
_____	_____	CPSC 315 Systems Software			
_____	_____	CPSC 316 Foundations of Programming Languages			
_____	_____	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 separately. They also receive separate grades.

Interdisciplinary Computing

Recommended Course Load

FALL

SPRING

1st year	Freshman Seminar CPSC 115L Intro to Computing <hr/> <hr/>	CPSC 215L Data Structures and Algorithms CPSC 203 Math Found. of Computing <hr/> <hr/>
2nd year	Cognate Course 1 Coordinate Course 1 <hr/> <hr/>	Cognate Course 2 Coordinate Course 2 <hr/> <hr/>
3rd year	Coordinate Course 3 Coordinate Course 4 <hr/> <hr/>	CS Elective 1 Coordinate Course 5 <hr/> <hr/>
4th year	CPSC 403 Senior Seminar CPSC 498 Senior Project CS Elective 2 Coordinate Course 6 <hr/> <hr/>	CPSC 404 Senior Seminar CPSC 499 Senior Project CS Elective 3 Coordinate Course 7 <hr/> <hr/>

Interdisciplinary Computing with Economics

Updated March 2022

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	Intro to Computing		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	Computers, Information, and Society		CPSC 340*	Principles of Software Engineering			
		CPSC 110	Visual Computing		CPSC 352	Artificial Intelligence			
		CPSC 110	Computing with Mobile Phones		CPSC 372	Database Fundamentals			
		CPSC 219	Theory of Computation		CPSC 375	High-Performance Computing			
		CPSC 225	Topics in Application Programming		CPSC 360	Deep Learning			
		CPSC 275L	Introduction to Computer Systems		CPSC 385*	Computer Security			
		CPSC 304	Computer Graphics		CPSC 395	Sensitive Information in a Connected World			
		CPSC 310*	Software Design		CPSC 415	Special Topics in Computing			
		CPSC 315	Systems Software						
		CPSC 316	Foundations of Programming Languages						
		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 separately. They also receive separate 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 Intro to Computing 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 _____ _____
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2nd year

CS Elective 1 ECON 301 Microeconomic Theory MATH 131 Calculus I _____ _____	CPSC 203 Math Found. of Computing ECON 302 Macroeconomic Theory _____ _____
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3rd year

CS Elective 2 ECON 318 Basic Econometrics _____ _____	CS Elective 3 ECON 3xx 300-level Economics course _____ _____
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4th year

CPSC 403 Senior Seminar CPSC 498 Senior Project ECON 331 Economics Senior Seminar _____ _____ _____	CPSC 404 Senior Seminar CPSC 499 Senior Project _____ _____ _____
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