

Winona State University Four-Year Program Map

Created on 6/13/2017 Effective Fall 2017

Program: Applied Computer Science (MATH 140+) (BS CSAC)

Emphasis (optional): Bioinformatics Emphasis

	Fall Semester			Spring Semester		
	Course	Requirement Met	SH	Course	Requirement Met	SH
	CS 101 Exploring Creative Computing	GE Goal 4/Major	3	CS 250 Algorithms and Problem Solving II	Major	4
	CS 234 Algorithms and Problem Solving I	Major	4	CS 275 Mathematical Foundations of Algorithms	Major	4
	MATH 140 Applied Calculus or Math 212 Calculus I	GE Goal 4/Major	3-4	STAT 210 Statistics	Major	3
	ENG 111 College Reading and Writing or CMST 191	GE Goal 1	4-3	CMST 191 Introduction to Public Speaking or ENG 111	GE Goal 1	3-4
	OR 100 Introduction to Higher Education	Recommended	1	Physical Development & Wellness	PDW	1
	NOTE: *Students need a total of 40 SH of general education courses that fulfill specific goal ar remain under 120 credits, choose courses that meet two goal areas. First-Year Fall Semester Credit Hour Total			To NOTE: Students must earn a grade of "C" or better in all major courses. A 2.50 GPA the major and overall. Students are allowed to attempt CS courses at most 3 times (in withdraws).		
-				First-Year Spring Semester Credit Hour Total		15-1
ear 2	CS 341 Data Structures*	Major/CAI	4	CS 313, CS 375, CS 385*, or CS Elective**	Major	3-4
	CS 313, CS 375, CS 385, or CS Elective**	Major	3-4	CS 313, CS 375, CS 385*, or CS Elective**	Major	3-4
	BIOL 241 Basics of Life	GE Goal 3/Major	4	BIOL 242 Organismal Diversity	GE Goal 3/Major	4
-	CHEM 212 Principles of Chemistry I	GE Goal 3/Major	4	CHEM 213 Principles of Chemistry II	GE Goal 3/Major	4
	,	,		Physical Development &Wellness	PDW	1
	NOTE: *CS 341 satisfies the math/critical analysis requirement. ** CS 313, 375, 385, 300-level elective this semester and the other 3 two semesters. Students review the DARS to find full list for CS El	3 courses from this list in the	e next	NOTE: *CS 385 satisfies a writing intensive requirement. **Studer 313, 375, 385 this semester and the other 2 courses from this list semesters. Students review the at DARS to find full list for CS Ele	in the previous and followin	
	CS 313, 375, 385, 300-level elective this semester and the other 3 two semesters. Students review the DARS to find full list for CS E	3 courses from this list in the	e next	313, 375, 385 this semester and the other 2 courses from this list semesters. Students review the at DARS to find full list for CS Ele	in the previous and followin	g
	CS 313, 375, 385, 300-level elective this semester and the other 3 two semesters. Students review the DARS to find full list for CS Electord-Year Fall Semester Credit Hour Total	3 courses from this list in the lectives.	e next 15-16	313, 375, 385 this semester and the other 2 courses from this list semesters. Students review the at DARS to find full list for CS Ele	in the previous and followin ctives.	g 15-1
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Winona State University Four-Year Program Map

Guide to 4 Year Major Maps

- 4 Year Major Maps are intended to show a recommended four-year pathway to a degree. Students must be fulltime, college ready, and ready to declare a major to follow the map exactly as shown. Maps are only a sample; there may be other pathways that lead to completion of the degree in four years.
- Major Maps are NOT intended to take the place of meetings with advisors.
- Major Maps are NOT intended to take the place of the Degree Audit System (DARs).

All courses listed on a major map will be labelled as one or more of the following:

GE Goal	General Education Goal	Indicates that the course meets one of the 10	
	Area	General Education Goals	
Gen	General Elective	Indicates that the course does not meet a	
Elec		General Education, Major or Minor requirement	
		but does count toward the degree	
Major	Major Requirement	Indicates that the course meets a Major	
		requirement	
Major	Major Elective	Indicates that the course counts toward the	
Elec		major as an elective, must be chosen from list	
		of approved courses	
Minor	Minor Requirement	Indicates that the course meets a Minor	
		requirement	
CAI	Critical Analysis	Indicates that the course counts as a Critical	
	Intensive	Analysis Intensive	
OI	Oral Intensive	Indicates that the course counts as an Oral	
		Intensive	
WI	Written Intensive	Indicates that the course counts as a Written	
		Intensive	
PDW	Personal Development	Indicates that the course counts as a Personal	
	and Wellness	Development and Wellness Requirement	

General Education Goal Areas:

		Minimum credits required
Goal 1	Communication	7 credits
Goal 2	Critical Thinking (Met with completion of	
	all other goal areas)	
Goal 3	Natural Science	7 credits
Goal 4	Mathematics	3-4 credits
Goal 5	History, Social/Behavioral Sciences	9 credits
Goal 6	Humanities and Fine Arts	9 credits
Goal 7	Human Diversity	3 credits
Goal 8	Global Perspective	3 credits
Goal 9	Ethic and Civic Responsibility	3 credits
Goal 10	People and the Environment	3 credits

Graduation Requirements:

- Minimum of 120 total credits (semester hours) required for Bachelors' Degree
- Minimum of 40 General Education credits required
- Minimum of 40 Upper Division credits required
- Minimum of 30 Residence credits required in Junior/Senior years
- Minimum WSU cumulative grade point average of 2.00; some programs require higher grade point averages

Major Maps are not contracts. Winona State University reserves the right to make changes at any time, without prior notice, to programs, policies, procedures and information described in this major map. Students should consult the appropriate academic department or college for currently accurate program information.