



Winona State University
Four-Year Program Map

Created on 5/16/2019
 Effective Fall 2019

Program: Data Science Major (BS DSCI)
Emphasis (optional):

Fall Semester				Spring Semester			
	Course	Requirement Met	SH	Course	Requirement Met	SH	
Year 1	CMST 191 or 192 or ENG 111 College Reading and Writing	GE Goal 1	3-4	CMST 191 or 192 or ENG 111 College Reading and Writing	GE Goal 1	3-4	
	MATH 140 or MATH 212	GE Goal 4/Major	3-4	DSCI 210 Data Science	Major	3	
	STAT 210 Statistics	Major	3	STAT 310 Intermediate Statistics	Major/WI	3	
	General Education Course	GE Goal 3/5/6/7/8/9/10	3	General Education Course	GE Goal 3/5/6/7/8/9/10	3	
	OR 100	Recommended	1	General Education Course	GE Goal 3/5/6/7/8/9/10	3	
	<i>NOTE: To remain under 120 credits, take courses that meets two goal areas within GOALS 5-10.</i>						
First-Year Fall Semester Credit Hour Total			13-15	First-Year Spring Semester Credit Hour Total			
Year 2	CS 234 Algorithms and Problem Solving I	Major	4	CS 250 Algorithms and Problem Solving II	Major	4	
	DSCI 310 Data Summary and Visualization	Major	3	DSCI 325 Management of Structured Data	Major/CAI	3	
	General Education Course	GE Goal 3/5/6/7/8/9/10	3	General Education Course	GE Goal 3/5/6/7/8/9/10	3	
	General Education Course (Lab)	GE Goal 3	4	General Education Course	GE Goal 3/5/6/7/8/9/10	3	
	<i>NOTE: In order to take courses number 300 or above in many content areas will require to complete prerequisite courses! Many of these prerequisite courses can be taken to fulfill your General Education Program (GEP), so choose courses in some of the Goal Areas with this in mind!</i>				<i>NOTE: Intensive requirements must be met and should be considered when selecting Interdisciplinary Emphasis courses and Major Electives.</i>		
	Second-Year Fall Semester Credit Hour Total			14	Second-Year Spring Semester Credit Hour Total		
Year 3	Interdisciplinary Emphasis^	Major	3	Interdisciplinary Emphasis^	Major	3	
	Major Elective* or CS 385	Major/WI	3-4	DSCI 395 Professional Skill Development for Data Sciences	Major	2	
	General Education Course	GE Goal 3/5/6/7/8/9/10	3	General Education Course	GE Goal 3/5/6/7/8/9/10	3	
	STAT 360 Regression Analysis	Major	3	General Education Course	GE Goal 3/5/6/7/8/9/10	3	
	General Elective	Elective	3	Major Elective* or CS 385	Major/WI	3	
				General Elective	Elective	3	
<i>NOTE: ^Interdisciplinary Emphasis (IE) are courses numbered 300 or above with SAME prefix, e.g. BIOL, ECON, FIN, ect. These should be chosen in consultation with your academic advisor. Courses with a DSCI, STAT, and CS prefix cannot be used to fulfill this requirement. DSCI 330, DSCI 415, STAT 335, and STAT 370 are Fall only courses. DSCI 330 and DSCI 415 are offered alternate years. *6 (S.H.) elective credits are required for the major, refer to DARS to see which classes are offered.</i>				<i>NOTE: Students must have 40 S.H. credits of 300 & 400 Level Courses. DSCI 425 and DSCI 430 are Spring only courses and offered alternate years. DSCI 425 meets the Oral Intensive requirement.</i>			
Third-Year Fall Semester Credit Hour Total			15	Third-Year Spring Semester Credit Hour Total			
Year 4	Interdisciplinary Emphasis^	Major	3	Interdisciplinary Emphasis^	Major	3	
	DSCI 488 or 492	Major	3	DSCI 495 Communication of Captones Outcomes	Major	1	
	General Education Course	GE Goal 3/5/6/7/8/9/10	3	General Education Course	GE Goal 3/5/6/7/8/9/10	3	
	PDW (Personal Development/Wellness)	Required	2-3	General Elective Course	Elective	3	
	General Elective (if take only 2 credits in PDW)	Elective	2	General Elective Course	Elective	3	
	Major Elective* or CS 385	Major/WI	3-4	General Elective Course	Elective	3	
	<i>NOTE: DSCI 330, DSCI 415, STAT 335, and STAT 370 are Fall only courses. DSCI 330 and DSCI 415 are offered alternate years.</i>				<i>NOTE:</i>		
Fourth-Year Fall Semester Credit Hour Total			16-17	Fourth-Year Spring Semester Credit Hour Total			

Total Credit Hours (SH): 120

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 Area	Indicates that the course meets one of the 10 General Education Goals
Gen Elec	General Elective	Indicates that the course does not meet a General Education, Major or Minor requirement but does count toward the degree
Major	Major Requirement	Indicates that the course meets a Major requirement
Major Elec	Major Elective	Indicates that the course counts toward the 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 Intensive	Indicates that the course counts as a Critical 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 and Wellness	Indicates that the course counts as a Personal 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.