Total Credit Hours (SH): 120



## Winona State University Four-Year Program Map

Program: Statistics Major 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 212 Calculus I	GE Goal 4/Major	4	MATH 213 Calculus II	Major	4
	STAT 210 Statistics	Major	3	MATH 242 Linear Algebra	Major	4
	General Education Course	GE Goal 5-10	3	STAT 310 Intermediate Statistics	Major/WI	3
	OR 100 Orientation	Recommended	1	Personal Development Wellness	PDW	1
	NOTE: Prerequisite for MATH 212: Qualifying score on the mathematics placement exam or M Precalculus.			NOTE: Some elective courses are not offered every year.		
	First-Year Fall Semester Credit Hour Total			First-Year Spring Semester Credit Hour Total		16
Year 2	STAT 335 Principles of Study Design	Major	3	STAT 365 Experimental Design and Analysis	Major	3
	STAT 360 Regression Analysis	Major	3	MATH 337 Probability	Major	3
	MATH 312 Multivariable Calculus	Major/CAI	4	DSCI 210 Data Science	Major	3
-	General Education Course	GE Goal 3	3	General Education Course (Lab)	GE Goal 3	4
	General Education Course	GE Goal 5-10	3	General Education Course	GE Goal 5-10	3
	that ACCT 211, ECIB 201 & 202 are all General Education Program courses. Students interested in Graduate School are strongly encouraged to double major in Mathematics & Statistics. Students interested in pursuing carees or graduate work in biostatistics should consider taking some courses in biology.					
	Second-Year Fall Semester Credit Hour Total			Second-Year Spring Semester Credit Hour Total		16
	STAT 450 Introduction to Mathematical Statistics I or Additional Elective**	Major/WI or Major Elective/OI	3	DSCI 325 Management of Structured Data	Major	
	1				Major	3
	Statistics Elective*	Major Elective/OI	3	STAT 460 Introduction to Mathematical Statistics II or Additional Elective**	Major/WI or Major Elective/OI	3
	Statistics Elective* General Education Course	Major Elective/OI GE Goal 5-10	3		Major/WI or Major	
		-		Additional Elective**	Major/WI or Major Elective/OI	3
-	General Education Course	GE Goal 5-10	3	Additional Elective** Statistics Elective*	Major/WI or Major Elective/OI Major Elective	3
-	General Education Course General Education Course	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10	3 3 3	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course	Major/WI or Major Elective/OI Major Elective Major	3 2
	General Education Course General Education Course General Education Course NOTE: *Statistics Elective must choose a STAT course from 320 to 499	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10	3 3 3	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course	Major/WI or Major Elective/OI Major Elective Major	3 2
	General Education Course General Education Course General Education Course NOTE: *Statistics Elective must choose a STAT course from 320 to 49s for a full list of courses offered. Third-Year Fall Semester Credit Hour Total	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10	3 3 3 or DARS	Additional Elective** Statistics Elective* STAT 395 Professional Skill Development for Statistics General Education Course  NOTE:	Major/WI or Major Elective/OI Major Elective Major	3 3 2 3
Year 4	General Education Course General Education Course General Education Course  NOTE: *Statistics Elective must choose a STAT course from 320 to 495 for a full list of courses offered.  Third-Year Fall Semester Credit Hour Total  STAT 488 Statistics Projects or STAT 492 Practicum in Stats  Additional Elective** (recommended DSCI 425 or STAT 370)	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 9. See Course Catalog Major Major Elective/OI	3 3 3 or DARS	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course  NOTE:  Third-Year Spring Semester Credit Hour Total  STAT 495 Communication of Capstone Outcomes  Additional Elective** or STAT 460 Introduction to	Major/WI or Major Elective/OI Major Elective Major GE Goal 5-10 Major Major Elective or	3 2 3 14
Year 4	General Education Course General Education Course General Education Course General Education Course NOTE: *Statistics Elective must choose a STAT course from 320 to 498 for a full list of courses offered.  Third-Year Fall Semester Credit Hour Total STAT 488 Statistics Projects or STAT 492 Practicum in Stats Additional Elective** (recommended DSCI 425 or STAT 370) or STAT 450 Introduction to Mathematical Statistics I	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 9. See Course Catalog Major Major Elective/Ol or Major/WI	3 3 3 or DARS	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course  NOTE:  Third-Year Spring Semester Credit Hour Total  STAT 495 Communication of Capstone Outcomes  Additional Elective** or STAT 460 Introduction to  Mathematical Statistics II	Major/WI or Major Elective/OI Major Elective Major GE Goal 5-10 Major Major Elective or Major/WI	3 3 2 3
Year 4	General Education Course General Education Course General Education Course  MOTE: *Statistics Elective must choose a STAT course from 320 to 498 for a full list of courses offered.  Third-Year Fall Semester Credit Hour Total  STAT 488 Statistics Projects or STAT 492 Practicum in Stats  Additional Elective** (recommended DSCI 425 or STAT 370) or STAT 450 Introduction to Mathematical Statistics I  General Elective	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 9. See Course Catalog Major Major Elective/OI or Major/WI Elective	3 3 3 or DARS 15 3 3	Additional Elective** Statistics Elective* STAT 395 Professional Skill Development for Statistics General Education Course  NOTE:  Third-Year Spring Semester Credit Hour Total STAT 495 Communication of Capstone Outcomes Additional Elective** or STAT 460 Introduction to Mathematical Statistics II General Elective	Major/WI or Major Elective/OI Major Elective Major GE Goal 5-10  Major Major Major Major Elective or Major/WI Elective	3 2 3 14
Year 4	General Education Course General Education Course General Education Course  NOTE: *Statistics Elective must choose a STAT course from 320 to 495 for a full list of courses offered.  Third-Year Fall Semester Credit Hour Total  STAT 488 Statistics Projects or STAT 492 Practicum in Stats  Additional Elective** (recommended DSCI 425 or STAT 370) or STAT 450 Introduction to Mathematical Statistics I  General Elective  General Education Course	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 9. See Course Catalog Major Major Elective/Ol or Major/WI Elective GE Goal 5-10	3 3 3 or DARS 15 3 3 3	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course  NOTE:  Third-Year Spring Semester Credit Hour Total  STAT 495 Communication of Capstone Outcomes  Additional Elective** or STAT 460 Introduction to  Mathematical Statistics II  General Elective  General Elective	Major/WI or Major Elective/OI Major Elective Major GE Goal 5-10  Major Major Major Elective or Major/WI Elective Elective	3 2 3 14 1 3
Year 4	General Education Course General Education Course General Education Course  MOTE: *Statistics Elective must choose a STAT course from 320 to 498 for a full list of courses offered.  Third-Year Fall Semester Credit Hour Total  STAT 488 Statistics Projects or STAT 492 Practicum in Stats  Additional Elective** (recommended DSCI 425 or STAT 370) or STAT 450 Introduction to Mathematical Statistics I  General Elective	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 9. See Course Catalog Major Major Elective/OI or Major/WI Elective	3 3 3 or DARS 15 3 3	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course  NOTE:  Third-Year Spring Semester Credit Hour Total  STAT 495 Communication of Capstone Outcomes  Additional Elective** or STAT 460 Introduction to  Mathematical Statistics II  General Elective  General Elective  General Elective	Major/WI or Major Elective/OI Major Elective Major GE Goal 5-10  Major Major Major Elective or Major/WI Elective Elective Elective	3 2 3 14 1 3
Year 4	General Education Course  General Education Course  General Education Course  NOTE: *Statistics Elective must choose a STAT course from 320 to 498 for a full list of courses offered.  Third-Year Fall Semester Credit Hour Total  STAT 488 Statistics Projects or STAT 492 Practicum in Stats  Additional Elective** (recommended DSCI 425 or STAT 370) or STAT 450 Introduction to Mathematical Statistics I  General Education Course  General Education Course	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 9. See Course Catalog Major Major Elective/Ol or Major/WI Elective GE Goal 5-10 GE Goal 5-10	3 3 3 or DARS 15 3 3 3 3	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course  NOTE:  Third-Year Spring Semester Credit Hour Total  STAT 495 Communication of Capstone Outcomes  Additional Elective** or STAT 460 Introduction to  Mathematical Statistics II  General Elective  General Elective  General Elective  Personal Development Wellness	Major/WI or Major Elective/OI Major Elective Major GE Goal 5-10  Major Major Major Elective or Major/WI Elective Elective	3 2 3 14 1 3 3
Year 4	General Education Course General Education Course General Education Course  NOTE: *Statistics Elective must choose a STAT course from 320 to 495 for a full list of courses offered.  Third-Year Fall Semester Credit Hour Total  STAT 488 Statistics Projects or STAT 492 Practicum in Stats  Additional Elective** (recommended DSCI 425 or STAT 370) or STAT 450 Introduction to Mathematical Statistics I  General Elective  General Education Course	GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 GE Goal 5-10 9. See Course Catalog Major Major Elective/Ol or Major/WI Elective GE Goal 5-10 GE Goal 5-10	3 3 3 or DARS 15 3 3 3 3	Additional Elective**  Statistics Elective*  STAT 395 Professional Skill Development for Statistics  General Education Course  NOTE:  Third-Year Spring Semester Credit Hour Total  STAT 495 Communication of Capstone Outcomes  Additional Elective** or STAT 460 Introduction to  Mathematical Statistics II  General Elective  General Elective  General Elective	Major/WI or Major Elective/OI Major Elective Major GE Goal 5-10  Major Major Major Elective or Major/WI Elective Elective Elective	3 2 3 14 1 3 3 3 3