## **Computational Statistics and Data Science Major Graduation MAP (6037)**

This is a suggested plan. Meet with your major advisor at least once a year to create a specific plan that best fits your academic needs. Remember, taking an average of 15 credit hours per semester facilitates timely graduation.



College of Science

## 2020/2021 Catalog Year NAME: \_\_\_\_\_

✓ Course	Credits	Sem Offered	Milestones & Notes	
Freshman (Semester 1) – Start MATH 1210	. 2010	• 28 credits MATH required courses.		
MATH 1210 (QL) Calculus I	4	Su, F, Sp	20 credits CS required courses.	
ENGL 2010 (EN) Intermediate College Writing	3	Su, F, Sp	<ul> <li>21 credits additional major electives.</li> <li>(40 credits must be upper division (≥3000) courses in</li> </ul>	
^CS 1030 Foundations of Computing	4	Su, F, Sp	any subject. Plan ahead.)	
Gen Ed Information Literacy	1	Su, F, Sp	• ATo apply for an Institutional Certificate of Proficiency in Programming Essentials students must complete CS	
*Gen Ed	3	Su, F, Sp		
			1030, 1400, 1410, and 2420.	
Total Semester Credits	15		]	
Freshman (Semester 2)		Overall and MATH GPA of 2.0 or higher.		
MATH 1220 Calculus II	4	Su, F, Sp	• 'C' or better in each MATH course.	
#CS 1400 Fundamentals of Programming	4	Su, F, Sp	<ul> <li>^ # Prerequisite waived for CS 1400 email math@weber.edu for override. Students may still take</li> </ul>	
MATH 1040 or another Statistical Concepts course	3	Varies	CS 1030 if applying for IC Programming Essentials.	
*Gen Ed	3	Su, F, Sp	* Cross-reference major electives with general	
			education requirements – some courses may double as	
			general education such as COMM 1020, COMM 2110,	
Total Semester Credits	14		ECON 2010, ECON 2020, PHYS 2210.	
Freshman (Optional)		• Should have a minimum of 30 credit hours - consider		
			summer classes if short.	
			<ul> <li>Major courses are prioritized over Gen Ed courses.</li> <li>Significant deviations from the MAP will likely result in</li> </ul>	
			additional semesters required to graduate.	
Total Semester Credits			]	
Sophomore (Semester 1)		• Overall and MATH GPA 3.3 for Departmental Honors		
MATH 2210 Calculus III	4	Su, F, Sp	program.	
CS 1410 Object Oriented Programming	4	Su, F, Sp	<ul> <li>**Students must have 40 credits of upper division (≥3000) courses in any subject. Plan ahead.</li> </ul>	
**Major Elective	3-5	Varies		
*Gen Ed	3	Su, F, Sp		
Total Semester Credits	14-16			
Sophomore (Semester 2)			• At least 9 credit hours of UD MATH must be completed	
MATH 2270 Elementary Linear Algebra	3	F, Sp	at Weber State University.	
CS 2420 Intro to Data Structures and Algorithms	4	Su, F, Sp		
**Major Elective	3-5	Varies		
*Gen Ed	3	Su, F, Sp		
*Gen Ed	3	Su, F, Sp	1	
Total Semester Credits	16-18		1	
Sophomore (Optional)			Should have a minimum of 60 credit hours - consider	
			summer classes if short.	
			1	
			1	
Total Semester Credits	T		1	

## **Computational Statistics and Data Science Major Graduation MAP (6037)**

√ Course	Credits	Sem Offered	Milestones & Notes	
Junior (Semester 1)	Apply for Departmental Honors program at least one			
MATH 3410 Probability & Statistics I	3	F	<ul> <li>semester before graduation. Overall and MATH GPA 3.3. Talk to advisor about research project.</li> <li>A # Prerequisite waived for CS 2550 email math@weber.edu for override. Students may still take CS 1030 if applying for IC Programming Essentials.</li> </ul>	
#CS 2550 Intro to Database Design and SQL	4	Su, F, Sp		
**Major Elective	3-5	Varies		
*Gen Ed	3	Su, F, Sp		
**Elective Credit if needed	3	Varies		
Total Semester Credits	16-18			
Junior (Semester 2)			**Students must have 40 credits of upper division	
MATH 3420 Probability and Statistics II	3	Sp	(≥3000) courses in any subject. Plan ahead.	
MATH 3450 Advanced Statistical Methods	4	Sp	• Contact Computer Science Department to apply for the Certificate of Proficiency in Programming Essentials.	
**Major Elective	3-5	Varies		
*Gen Ed	3	Su, F, Sp		
**Elective Credit if needed	3	Varies		
Total Semester Credits	16-18			
Junior (Optional)			• Should have a minimum of 90 credit hours - consider	
			summer classes if short.	
Total Semester Credits				
Senior (Semester 1)			**Students must have 40 credits of upper division	
MATH 4400 Statistical Analysis of Big and Small Data	3		(≥3000) courses in any subject. Plan ahead.	
**Major Elective	3-5	Varies		
*Gen Ed	3	Su, F, Sp		
*Gen Ed	3	Su, F, Sp		
**Elective Credit if needed	3	Varies		
Total Semester Credits	15-17			
Senior (Semester 2)			• Minimum 120 credit hours needed for graduation.	
CS 3580 Data Science Algorithms	4	Sp	Present research project for Departmental Honors.	
**Major Elective	3-5	Varies	<ul> <li>Apply for graduation early.</li> <li>Complete Graduate Exit Survey.</li> <li>Contact Math Dept. for graduation sign-off.</li> </ul>	
**Elective Credit if needed	3	Varies		
**Elective Credit if needed	3	Varies		
**Elective Credit if needed	3	Varies		
Total Semester Credits	15-17		1	
Senior (Optional)				
			1	
			1	
			1	
Total Semester Credits			]	
Total # of Credits for Graduation (120 minimum)			1	

Gen Ed Breadth Requirements			
CA Creative Arts	□HU Humanities	□CA or HU	AVOID MISADVISEMENT!
□SS Social Science	□SS Social Science	□Al Amer Inst	Consult your <b>academic advisor</b> , the <b>WSU catalog</b> (weber.edu/catalog), and your <b>CatTracks</b> degree evalu
□LS Life Science	□PS Physical Science	□LS or PS	(log into your eWeber Student Portal).
DV (Diversity cred	it can double dip w/Bread	dth courses)	

Revised 2/24/2020

degree evaluation