BACHELOR OF SCIENCE IN MATHEMATICAL SCIENCES **Catalogue**

Major: MATHEMATICS and STATISTICS (Double Major) **2022-2023**

Student: **Date:**

netID: **Advisor:**

Year 1

Semester 1	Cr	Status	Semester 2	Cr	Status
CEMS 1500 - CEMS First Year Seminar	1		QD: MATH 1248 - Calculus II	4	
QD: CS 1210 - Computer Programming I	3		SPCH 1400 - Effective Speaking	3	
QD: MATH 1234 - Calculus I	4		WIL: (ENGL 1001, HCOL 1000)[1]	3	
Humanities & Social Science Course[1]	3		QD: MATH 2055 - Fundamentals of Mathematics	3	
QD: STAT 1410 or 2430 - Basic Stat Meth I/Stat for Engr	3		QD: STAT 2830 - Basic Statistical Methods II	3	
Total credits	*14*		*Total credits*	*16*	

Year 2

Semester 1	Cr	Status	Semester 2	Cr	Status
QD: MATH 2248 - Calculus III	4		QD: MATH 2522 or 2544 - (Applied) Linear Algebra	3	
Allied Field Course[2] (with lab)	4		QD: STAT 3010 - Stat Computing & Data Analysis	3	
QD: STAT 2870 - Basics of Data Science	3		Humanities & Social Science Course[1]	3	
Humanities & Social Science Course[1]	3		Major Course[3] (MATH, STAT, CS 1XX)	3	
QD: STAT 2510 or 5510 - Applied Probability/Prob Theory	3		MATH 3230/3737/3468/3551	3	
Total credits	*17*		*Total credits*	*15*	

Year 3

Semester 1	Cr	Status	Semester 2	Cr	Status
Allied Field Course[2]	3		Allied Field Course[2]	3	
Major Course[3] (STAT)	3		QD: STAT 3410 or 5610 - Statistical Inference/Theory	3	
Allied Field Course[2]	3		Allied Field Course[2]	3	
Humanities & Social Science Course[1]	3		Humanities & Social Science Course[1]	3	
QD: STAT 3210 - Statistical Methods II	3		MATH 3230/3737/3468/3551	3	
Total credits	*15*		*Total credits*	*15*	

Year 4

Semester 1	Cr	Status	Semester 2	Cr	Status
Major Course[3] (STAT)	3		Humanities & Social Science Course[1]	3	
Allied Field Course[2]	2		Allied Field Course[2] (1XX)	3	
Allied Field Course[2] (1XX)	3		STAT 4810 or 3996 - Capstone or Thesis	3	
MATH XXXX	4		MATH XXXX	3	
Free Elective	4				
Total credits	*16*		*Total credits*	*12*	

Minimum Total Credits Required for Degree: 120

Ultilize degree audit or re-numbering widget (bit.ly/UVMWidget) to confirm courses.

1. Humanities & Social Sciences: Twenty-one credits of courses selected from Categories I, II, and III listed in the Catalogue (I: Language & Literature, II: Humanties & Fine Arts, III: Social Sciences). See Catalogue for full list of courses.
Students are encouraged to use these courses to fulfill the University Requirements - Diversity (D1/D2), Sustainability (SU), and Foundational Writing & Information Literacy (FWIL). Note the Quantitative (QR) reasoning is fulfilled by core requirements.

2. Allied Field Courses: Twenty-four credits selected from the list of Allied Fields outlined in the Catalogue, including at least one laboratory experience in science or engineering. Of these twenty-four credits, at least six must be in courses numbered 100 or above, and at least six must be taken in fields 1 to 5. Refer to Catalogue for complete list.

3. Major Courses: An additional six credits of statistics, so that the total credits earned in statistics is at least twenty-four. A minimum of three additional credits in mathematics, statistics, or computer science courses numbered 100 or above, so that a total of at least forty-five credits in the core and major courses are earned. A total of eighteen credits in the combined core and major courses must be taken at the 200-level. No more than twelve credits can be taken in computer science.

N.B. Statistics majors may count no more than two of the following courses toward their degree requirements: STAT 1050,STAT 1110, STAT 1410, and STAT 2430. Credit not given for more than one of STAT 1410, and STAT 2430. Recommended courses are STAT 1410, and STAT

This document is an advising tool and should be used in combination with a student's degree audit, as well as the published Catalogue for 2022-2023 found at http://catalogue.uvm.edu/