

**BACHELOR OF SCIENCE IN MATHEMATICAL SCIENCES**

**Catalogue**

**Major: STATISTICS**

**2020-2021**

**Student:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**netID:** \_\_\_\_\_

**Advisor:** \_\_\_\_\_

**Year 1**

Semester 1	Cr	Status	Semester 2	Cr	Status
CEMS 050 - CEMS First Year Seminar	1		MATH 022 - Calculus II	4	
CS 021 - Computer Programming I	3		SPCH 011 - Effective Speaking	3	
MATH 021 - Calculus I	4		Humanities & Social Science Course <sup>1</sup>	3	
Humanities & Social Science Course <sup>1</sup>	3		Free Elective	3	
STAT 141/143/211 - (Basic) Stat Meth I/Stat for Engr	3		STAT 183 - Basic Statistical Methods II	3	
<i>Total credits</i>	<i>14</i>		<i>Total credits</i>	<i>16</i>	

**Year 2**

Semester 1	Cr	Status	Semester 2	Cr	Status
MATH 121 - Calculus III	4		MATH 122 or 124 - (Applied) Linear Algebra	3	
Allied Field Course <sup>2</sup> (with lab)	4		STAT 201 - Stat Computing & Data Analysis	3	
STAT 187 - Basics of Data Science	3		Humanities & Social Science Course <sup>1</sup>	3	
Humanities & Social Science Course <sup>1</sup>	3		Major Course <sup>3</sup> (MATH/STAT/CS 1XX)	3	
STAT 151/251 - Applied Probability/Prob Theory	3		Free Elective	3	
<i>Total credits</i>	<i>17</i>		<i>Total credits</i>	<i>15</i>	

**Year 3**

Semester 1	Cr	Status	Semester 2	Cr	Status
Allied Field Course <sup>2</sup>	3		Allied Field Course <sup>2</sup>	3	
Major Course <sup>3</sup> (STAT)	3		STAT 241/261 - Statistics Inference/Theory	3	
Allied Field Course <sup>2</sup>	3		Allied Field Course <sup>2</sup>	3	
Humanities & Social Science Course <sup>1</sup>	3		Humanities & Social Science Course <sup>1</sup>	3	
STAT 221 - Statistical Methods II	3		Free Elective	3	
<i>Total credits</i>	<i>15</i>		<i>Total credits</i>	<i>15</i>	

**Year 4**

Semester 1	Cr	Status	Semester 2	Cr	Status
Major Course <sup>3</sup> (STAT)	3		Humanities & Social Science Course <sup>1</sup>	3	
Allied Field Course <sup>2</sup>	3		Allied Field Course <sup>2</sup> (1XX)	3	
Allied Field Course <sup>2</sup> (1XX)	3		STAT 281/293 - Capstone or Thesis	3	
Free Elective	3		Free Elective	3	
Free Elective	4				
<i>Total credits</i>	<i>16</i>		<i>Total credits</i>	<i>12</i>	

**Minimum Total Credits Required for Degree: 120**

1. Humanities & Social Sciences: Twenty-one credits of courses selected from Categories I, II, and III listed in the Catalogue (I: Language & Literature, II: Humanities & Fine Arts, III: Social Sciences). These twenty-one credits must be distributed over at least two categories, and at least six credits must be taken in each of the two categories chosen.

Students are encouraged to use these courses to fulfill the University Requirements for Diversity (D1/2), Sustainability (SU), and Foundational Writing and Information Literacy (FWIL). Students must take one three-credit D1 course and a second three-credit D1 or D2 course, per University Diversity Requirement. Students must select one SU course, per the University Sustainability Requirement. Students must take either ENGS 001 or HCOL 085 (only for students enrolled in the Honors College), to fulfill the FWIL - students transferring from the College of Arts and Sciences can use a TAP class to fulfill this requirement.

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.

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. The University's Quantitative Reasoning (QR) requirement is built into the Mathematical Sciences curriculum.

N.B. The above requirements amount to 100 credits and a student is required to earn 120 credits to earn a B.S. in Mathematical Sciences.

**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 2020-2021 found at <http://catalogue.uvm.edu/>**