# B.S. IN MATHEMATICAL SCIENCES, Double major in Statistics and Mathematics

**Catalogue 2019-2020**

Student: _____     Advisor: _____     **Honors College**

Net ID: _____     Date: _____

## CORE:                        CREDITS

| MATH 21   4 | MATH 22   4 | MATH 121   4 | MATH 122 or 124 | CS 21   3 | CEMS 101   1 | **19** |
|---|---|---|---|---|---|---|
| Calculus I | Calculus II | Calculus III | Linear Algebra | Intro. to Prog. | Jr Yr HCOL Res Exp. | |
| STAT 201   3 | STAT 141, 143 or 211   3 | STAT 151 or 251   3 | STAT 221   3 | STAT 241 or 261   3 | *STAT 281 or 293 | **18** |
| Statistical Analysis Via Computer | Statistical Methods or Stat for Engrs. | Applied Probability or Probability Theory | Statistical Methods II | Statistical Inference or Statistical Theory | Practicum or Honors Thesis | |

\* Students may substitute an advisor-approved 200-level STAT course for the STAT 281/STAT 293 requirement

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An additional 6 credits in STAT (must have a total of 24 STAT credits including core courses); at least 3 additional credits in MATH, STAT or CS numbered 100 or above (must have a total of 45 credits of MATH, STAT or CS including applicable core courses); a total of 18 credit hours of MATH, STAT, or CS must be numbered 200 or above (core courses can be used to fulfill this requirement); no more than 12 credit hours can be CS.

| *STAT 294 Honors Thesis | | **9 credits (minimum)** |
|---|---|---|
| | | *Students may pursue a thesis in either MATH or STAT |

**MATH requirements:** Students may earn a double major in mathematics and statistics by meeting the requirements of the statistics major and earning an additional fifteen credits in mathematics including MATH 052 and two of MATH 230, 237, 241, and 251 (may not overlap with statistics major requirements):

| MATH 052 | MATH 230/237/241/251 | MATH 230/237/241/251 |
|---|---|---|
| *MATH XXX | *MATH XXX | **15 credits (min)** |

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**ALLIED FIELDS:**    24 credit hours from Allied Fields (including at least one laboratory experience in science or engineering); at least 6 credits numbered 100 or above; at least 6 credits in fields 1 – 5.

Absolutely no courses from the 'major courses' above can be used to fulfill an allied field requirement. There is no overlapping.

1. Physical Sciences    4. Engineering    7. Business Administration    10. Environmental Sciences/Studies
2. Biological Sciences    5. Computer Sci. (110 or higher)    8. Psychology    11. Natural Resources
3. Medical Sciences    6. Agricultural Sciences    9. Economics         **CREDITS**

| | | | | **24** |
|---|---|---|---|---|
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**HSS:**    HCOL 085, SPCH 011 plus 18 credit hours of HSS from categories I, II & III (for a total of 24 credit hours). At least 6 credit hours must be taken in at least 2 different categories. HCOL 086, 185, 186 may count toward various categories with Program Chair & Advisor approval (documented with a substitution form).

*Category I*:    Arabic, Chinese, Classics, English, French, German, Greek, Hebrew, Italian, Japanese, Latin, Linguistics, Portuguese, Russian, Spanish, World Literature

*Category II*:    Art History, Dance, Film & Television Studies, Music, Philosophy, Religion, Speech, Studio Art, Theatre

*Category III*:    Anthropology, Communication Sciences & Disorders, Critical Race & Ethnic Studies, Economics, Gender, Sexuality, and Women's Studies, Geography, Global and Regional Studies, History, Holocaust Studies, Human Development & Family Studies, Political Science, Psychology, Sociology, Vermont Studies

| *Category I: Language & Literature* | HCOL 085   3 | SPCH 011   3 | | | |
|---|---|---|---|---|---|
| | Pursuit of Knowledge | Effective Speaking | | | |
| *Category II: Fine Arts, Philosophy & Religion* | | | | | **24** |
| *Category III: Social Sciences* | | | | | |

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**Total credits required for graduation is 120. Students must also satisfy the University Diversity Requirement (3 credits from category D1 and 3 credits from either category D1 or D2) and the University's Sustainability requirement. 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 2019-2020 found at http://catalogue.uvm.edu/**