Plan of Study: Bachelor of Science in Statistical Data Science

Department of Statistics, College of Liberal Arts and Sciences

Student Name: Student ID: Catalog Year:

Prerequisite Course Requirements

Students must apply for admission to the Bachelor of Science (BS) in Statistical Data Science program. Applicants are required to complete at least 24 credits, 15 of which must be at UConn, with a cumulative GPA of 3.2 or higher.

☐ MATH 1132Q

☐ STAT 1000Q/1100Q

☐ Introductory programming course (CSE 1010, CSE 1729, or STAT 2255):

☐ Additional courses:

Total credits:

Cumulative GPA:

Major Course Requirements

Statistical data science majors are required to take at least 36 major credits, including the following courses, and maintain a 3.2 cumulative GPA:

- One or more courses in each of the Core Area Requirements.
- A nine-credit domain sequence.
- STAT 3255. Introduction to Data Science.
- STAT 4915. Data Science in Action (capstone) and STAT 4916W (information literacy competency and writing in the major requirement). *Note: Students pursuing the Biological Data Science domain may substitute these two courses†.*

Core Area Requirements

Programming and Data Management (STAT 2255):

Basic Data Analysis (STAT 3025Q or STAT 3375Q or MATH 3160; and STAT 3215Q):

Data Ethics (PHIL 3202):

Data Visualization (STAT 3675Q or GEOG 3510 or EEB 4100):

Advanced Analysis (MATH 2210Q and STAT 4255):

Domain Sequence

Domain name:

Domain courses:

Additional Required Courses

☐ STAT 3255

☐ Capstone requirement (STAT 4915 or MCB 4897W or EEB 4896W):

☐ W requirement (STAT 4916W or MCB 4897W or EEB 4896W):

Total credits:

Cumulative GPA:

Qualifying Courses for the Major

Core Area Requirements

- Programming and Data Management: STAT 2255 (one course, 3 credits)
- Basic Data Analysis: STAT 3025Q or STAT 3375Q* or MATH 3160; and STAT 3215Q (two courses, 6 credits).
- Data Ethics: PHIL 3202 (one course, 3 credits).
- Data Visualization: STAT 3675Q* or GEOG 3510 or EEB 4100** (one course, at least three credits).
- Advanced Analysis: MATH 2210Q and STAT 4255 (two courses, 6 credits).

Please note:

- **Students completing a statistics domain must take STAT 3375Q and STAT 3675Q to meet these requirements.*
- ***EEB 4100 is recommended for students completing the Biological Data Science domain.*
- *†Students completing a Biological Data Science domain may take any of the following to meet the capstone and W requirement: (i) STAT 4915 / STAT4916W, (ii) EEB 4896W, or (iii) MCB 4897W. Credits in EEB 4896W cannot simultaneously count toward both an Honors thesis in EEB and a Data Science capstone.*

Domain Sequences

Advanced Statistics

STAT 3445 and two of the following: STAT 3515Q, STAT 4625, STAT 4825, STAT 4845, STAT 4190.

Please note: At least and no more than 3 credits of STAT 4190 may count toward the major and must be pre-approved by the Department of Statistics for adequate data science content.

American Political Institutions

Three of the following: POLS 3600, POLS 3601, POLS 3603WQ, POLS 3604, POLS 3606.

American Political Representation

Three of the following: POLS 2607, POLS 3608W, POLS 3612, POLS 3617, POLS 3618, POLS 3625.

Biological Data Science

Three of the following: EEB 3899‡, EEB 5050, EEB 5300, EEB 5348, EEB 5349, MCB 3421, MCB 3637, MCB 4008, MCB 4009, MCB 4014, MCB 5430, MCB 5472, MCB 5631, MCB 4896‡.

Please note:

- *Students can choose any three courses‡ from the list above based on availability; however, interested students might consider choosing subsets of courses from the list above that align with established sub-areas:*
    - *Genome sequencing and analysis: EEB 5300, MCB 3637, MCB 5430.*
    - *Phylogenetics and evolution: EEB 5348, EEB 5349, MCB 3421, MCB 5472.*
    - *Ecological analyses: EEB 5050, EEB 5348, MCB 5631.*
    - *Molecular structure and function: MCB 4008, MCB 4009, MCB 4014.*
- *‡ Only 3 credits of either EEB 3899 or MCB 4896 can count toward the major, and these credits cannot simultaneously count toward another major or degree.*

Financial Analysis

Three of the following: ECON 3313, ECON 3315, ECON 3413, ECON 4323.

Marine Science

Three of the following: MARN 3001, MARN 3002, MARN 3014, MARN 4001, MARN 4210Q.

Population Dynamics

Three of the following: SOCI 2110(W), SOCI 2651(W), SOC 2660(W), SOCI 2820(W), SOCI 2901(W), SOCI 3971(W).