

## Mathematics & Statistics Department Statistics/Data Science Specialization Proposal

Name: Data Science and Statistics

17.5 Courses Total

|     |         |  |
|-----|---------|--|
| 0   | MAT 099 | Orientation to Mathematics and Statistics  |
| 1   | MAT 128 | Calculus B                                 |
| 1   | MAT 200 | Proof Writing through Discrete Mathematics |
| 1   | MAT 205 | Linear Algebra: Theory and Applications    |
| 1   | MAT 229 | Calculus C                                 |
| 0.5 | MAT 275 | Sophomore Seminar                          |
| 1   | MAT 316 | Probability                                |
| 1   | STA 215 | Statistical Inference & Probability        |
| 1   | STA 305 | Regression Analysis                        |
| 1   | STA 410 | Mathematical Statistics                    |
| 1   | STA 498 | Capstone                                   |

### *Options*

- 1 Data Science Option from STA 306 or STA 307 or STA 404
- 1 Option from STA3xx or STA4xx
- 3 Options from MAT3xx, MAT4xx, STA3xx, or STA4xx (one non-MAT/STA course from the approved list in PAWS may be counted towards this 3 unit requirement)

### *Correlates*

- 1 CSC 220 Computer Science I : Computational Problem Solving
- 1 Science Lab Course at 2xx level or above
- 1 Science Course at 2xx level or above, or CSC 230 (Computer Science II: Data Structures), or MAT 341 (Computational Mathematics)\*

\*MAT 341 can be used to satisfy either the correlate requirement or as one of the 3 option courses, but not both.

Additionally, the following are suggested as courses for those seeking Data Science options specifically:

STA 306, STA 307, STA 404, MAT 341, CSC 315, CSC 335 (both CSC courses require CSC271 as a prerequisite)