**Mathematics Major (Data Science Spec) BS Degree**  **Course Units (128 Credits) AY 2020-2021**

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| Name:       |  | Updates |
| TCNJ ID:      | TCNJ Entry:       | Major Entry:      |       |       |       |
| 2nd Major:  | 1st Minor: | 2nd Minor:  |       |       |       |
| Earned Units:       | GPA:       | Major GPA:      |       |       |       |
| **Liberal Learning Breadth Requirements****NOTE: courses in *italics* are also listed as major and/or correlate courses.** | **MAJOR PROGRAM REQUIREMENTS****NOTE: courses in *italics* are also listed****as liberal learning courses****15 Mathematics and Statistics,****1 Correlate/Mathematics,****2 Correlate/Liberal Learning and** **1 Correlate course as listed.** | **Civic Responsibilities, Proficiencies & Electives** |
| **Courses**  | **Courses**  | **Courses**  |
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| **Indicate Option Met:** |
| **[ ]  Designated Interdisciplinary Concentration (A)** (Attachment) |
| [ ]  **Second Major (A)** (Attachment) |
| [ ]  **Self-Designed Interdisciplinary Concentration (B)** (Attachment)      |
| [ ]  **Breadth Distribution List (C) -8 Courses:** |
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| **Arts & Humanities/Social Science & History – 5 courses.**  |
| 1 course unit in Literary, Visual, Performing Arts (LVPA) |  |
| 1 course unit in World Views/Ways of Knowing (WVWK) |  |
| 1 course unit in Behavioral, Social or Cultural Perspectives (BSCP) |  |
| 1 course unit in Social Change in Historical Perspective (SCHP) |  |
| 1 additional course unit in LVPS, WVWK, BSCP, or SCHP |  |
| **Natural Sciences & Quantitative Reasoning**  Natural Science (at least one lab); Quantitative Reasoning (at least one from each) |
| MAT 127 Calculus A | None |
| *Any two natural science**courses from the Dept. list (see website), at least one with a lab.* |  |
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| **Correlate Courses: 3** Courses |
| *Any one natural science**courses from the Dept.**list (see website), with a lab.* |  |
| CSC220 Comp. Sci I |  |
| CSC230 Comp. Sci II |  |
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Rev 6/2019 |

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| **Major Core: 12.5** Courses |
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| **MAT 128** Calculus B |  |
| **MAT 200** Proof Writing |  |
| **MAT 205** Linear Algebra |  |
| **MAT 229** Multivar. Calc. |  |
| **MAT 275** Soph. Seminar |  |
| **MAT 341** Comp. Math. |  |
| **STA 215** Stat. Inference |  |
| **STA 305** Regression Anal.  |  |
| **STA 306** Multivar. Stat. |  |
| **STA 307** Data Mining |  |
| **STA 370** Stat. Soft. Devel. |  |
| **STA 404** Comp./Bayes Stat. |  |
| **STA 498** Capstone  |  |
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| **Major Options/Concentrations:**  |
| 2 MAT/STA 3xx/4xx Options  |
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| **Major non-credit requirement:**[ ]  **MAT 099**  Orientation Sem  |  |
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| **Graduation Requirements:**1. Minimum GPA of 2.00. A 2.5 overall GPA in the courses STA 215, MAT 127, 128, 200, 205, 229.
2. Minimum of 6 units in the major must be earned at TCNJ. A minimum of 4 of the final 6 units of the major must be earned at TCNJ.
3. At least C- in all MAT/STA courses with the following exception: at most one grade of D or D+ in a MAT/STA 3xx/4xx course that is not a prerequisite for another course.
4. At most one course unit of independent work courses can count towards the major requirements.
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**Waivers & Substitutions**

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| **Civic Responsibilities –** May be met through Courses, Programs or Sustained Experiences |
| [ ] **Community Engaged Learning** |
|  |       |  |
| [ ] **Gender** |
|  |       |  |
| [ ]  **Global Perspective** |
|  |       |  |
| [ ]  **Race & Ethnicity** |
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| **Intellectual & Scholarly Growth:**  |
| **WRI 101 (if required)**  |  |
| **WRI 102 (if required)** |  |

**Writing Intensive Courses: 3**

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| FSP First Seminar |  |
| STA 305 Regr. An. |  |
| STA 498 Capstone |  |

**[ ]  Information Literacy**On-Line Library

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| [ ]  **Second Language** Demonstrated proficiency at the Low-Intermediate Level (0-3 Courses Based on Placement) |
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| [ ]  Not Applicable |

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| **Electives 3** Courses |
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