**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** | | | |
| |  |  | | --- | --- | | **Indicate Option Met:** | | | **Designated Interdisciplinary Concentration (A)** (Attachment) | | | **Second Major (A)** (Attachment) | | | **Self-Designed Interdisciplinary Concentration (B)** (Attachment) | | | **Breadth Distribution List (C) -8 Courses:** | | |  | | |  | | | **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.* |  | |  |  |  |  |  | | --- | --- | | **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 |  | |  |  |   Rev 6/2019 | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **Major Core: 12.5** Courses | | |  |  | | **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 |  | |  |  | | |  | | | |  |  | | --- | --- | | **Major Options/Concentrations:** | | | 2 MAT/STA 3xx/4xx Options | | |  |  | |  |  | | |  | | | **Major non-credit requirement:**  **MAT 099**  Orientation Sem |  | | |  |  | | | **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. | |   **Waivers & Substitutions**   |  | | --- | | **for** | | | | |  |  |  | | --- | --- | --- | | **Civic Responsibilities –** May be met through Courses, Programs or Sustained Experiences | | | | **Community Engaged Learning** | | | |  |  |  | | **Gender** | | | |  |  |  | | **Global Perspective** | | | |  |  |  | | **Race & Ethnicity** | | | |  |  |  |  |  |  | | --- | --- | | **Intellectual & Scholarly Growth:** | | | **WRI 101 (if required)** |  | | **WRI 102 (if required)** |  |   **Writing Intensive Courses: 3**   |  |  | | --- | --- | | FSP First Seminar |  | | STA 305 Regr. An. |  | | STA 498 Capstone |  |   **Information Literacy**  On-Line Library   |  |  | | --- | --- | | **Second Language**  Demonstrated proficiency at the Low-Intermediate Level (0-3 Courses Based on Placement) | | |  |  | |  |  | |  |  | | Not Applicable | |  |  |  | | --- | --- | | **Electives 3** Courses | | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | | | | |