# Unofficial Degree Planning WorksheetCatalog Year: 2023 – 2024

# Major: BS in Data Science

This worksheet is designed to help you plan and track your progress toward your degree. It lists all graduation requirements. Course descriptions are available in the current catalog. More detailed descriptions of the program can be found in the [2023 – 2024 catalog](https://ut.smartcatalogiq.com/current/catalog/).

## University Graduation Requirements

[x] Students must earn 124 hours to be eligible for graduation.

[ ] Students must maintain an overall minimum GPA of 2.0 to be eligible for graduation.

[ ] Students must maintain a major minimum GPA of 2.0 to be eligible for graduation.

[ ] Students must complete 31 credit hours in residency at UT to be eligible for graduation.

[ ] Students must complete 15 credit hours in residency at UT in their major coursework.

## Spartan Studies Requirements

### First-Year

| **First-year Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| UTAMPA 101 (1cr)/102 (1cr) – First-Year seminar two semester sequence**or** UTAMPA 103 (2cr) – Transfer student seminar**or** UTAMPA 104 (2cr) Veteran student seminar– must be taken in residency |  |  |
| AWR 101 (4cr) - Reading Locally & Globally**or** AWR 110 (5cr) – Academic Writing for Multilingual Students |  |  |
| Math (4cr) Requirement (choose one):MAT 155, MAT 160, MAT 170, MAT 201, MAT 225, MAT 260, MAT 261 | MAT 260 |  |

### Core

| **Core Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| AWR 201 (4cr) – Writing and Research: The Local and the Global*Pre-requisite (one of the following): AWR 101, AWR 110, or equivalent* |  |  |
| [Core Humanities](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_CoreHumanitiesLink.pdf) (4cr) – must be taken in residency, AWR 201 is a prerequisite or must be taken concurrently |  |  |
| [Core Social Science](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_CoreSocialSciencesLink.pdf) (4cr) – must be taken in residency, AWR 201 is a prerequisite or must be taken concurrently |  |  |
| UTAMPA 200 (1cr) Digital Literacy: Coding**or** one of the following: CSC 101, ITM 251, MAT 285, PHY 180 | CSC 101 |  |
| UTAMPA 201 (0cr) Career Readiness |  |  |
| Spartan Studies Culminating Experience (4cr) – must be taken in residency *Pre-requisite: Spartan Studies First-year and Core Requirements (UTAMPA 101/02 or UTAMPA 103 or UTAMPA 104, AWR 101, Math, AWR 201, UTAMPA 200, UTAMPA 201, Core Humanities, Core Social Science); individual courses may have additional pre-requisites*  |  |  |

### Distribution Requirements

Note that **one** of the distribution requirements may also be used to meet requirements in the major if there is overlap.

| **Distribution Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| [Social or Behavioral Science](https://www.ut.edu/uploadedFiles/Academics/Provost/Spartan%20Studies%20on%20ut.edu/SpartanStudies_SocialScienceDistributionLink.pdf) (4cr) |  |  |
| [Visual and Performing Arts](https://www.ut.edu/uploadedFiles/Academics/Provost/Spartan%20Studies%20on%20ut.edu/SpartanStudies_VisualandPerformingArtsLinkupdated.pdf) (3cr) |  |  |
| [Text-Based Humanities](https://www.ut.edu/uploadedFiles/Academics/Provost/Spartan%20Studies%20on%20ut.edu/SpartanStudies_Text-BasedHumanitiesDistributionLink.pdf) (4cr) |  |  |
| [Natural Science](https://www.ut.edu/uploadedFiles/Academics/Provost/Spartan%20Studies%20on%20ut.edu/Spartanstudies_NaturalScienceDistributionLink.pdf) (4cr) |  |  |

## Data Science Requirements (56 Credits)

### Data Science Requirements

| **Data Science Requirements** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| CSC 101 (4cr) – The Science of Computing I (1) (Can fulfill Spartan Studies UTAMPA 200 requirement) |  |  |
| CSC 102 (4cr) – The Science of Computing II (2)*Pre-requisite: CSC 101 with a “C” or higher* |  |  |
| CSC 201 (4cr) – Data Structures and Algorithm Analysis*Pre-requisite: CSC 102 with a “C” or higher* |  |  |
| CSC 340 (4cr) – Database Management Systems*Pre-requisite: CSC 201 with a “C” or higher***or** CSC 410 (4cr) – Artificial Intelligence and Machine Learning*Pre-requisite: CSC 301 with a “C” or higher* |  |  |
| DSC 101 (4cr) – Introduction to Data Science *Pre-requisite: CSC 101 with a “C” or higher* |  |  |
| DSC 201 (4cr) – Applied Data Science*Pre-requisite: CSC 102 with a “C” or higher, DSC 101 with a “C” or higher, MAT 272 with a “C” or higher* |  |  |
| DSC 401 (4cr) – Data Science Capstone*Pre-requisite: CSC 201, DSC 201, MAT 310, and Senior Standing* |  |  |
| MAT 260 (4cr) – Calculus I (1) (Can fulfill Spartan Studies Mathematics Requirements) *Pre-requisite: MAT 170 with a grade of “C” or higher, or equivalent* |  |  |
| MAT 261 (4cr) – Calculus II (2)*Pre-requisite: MAT 260 with a grade of “C” or higher* |  |  |
| MAT 262 (4cr) – Calculus III (3)*Pre-requisite: MAT 261 with a grade of “C” or higher* |  |  |
| MAT 271 (4cr) – Computational Linear Algebra*Pre-requisite: MAT 261 with a grade of “C” or higher* |  |  |
| MAT 272 (4cr) – Applied Statistics*Pre-requisite: MAT 225 or MAT 260 with a grade of “C” or higher* |  |  |
| MAT 310 (4cr) – Probability*Pre-requisite: MAT 262 with a grade of “C” or higher* |  |  |
| MAT 402 (4cr) – Applied Regression Analysis*Pre-requisite: MAT 310 or equivalent***or** MAT 425 (4cr) – Mathematical Statistics*Pre-requisite: MAT 272 and MAT 310 with a grade of “C” or higher* |  |  |