# Unofficial Degree Planning WorksheetCatalog Year: 2023 – 2024

# Major: BS in Mathematics with Computer 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://www.ut.edu/academics/university-catalogs).

## 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/SpartanStudies/SpartanStudies_SocialScienceDistributionLink.pdf) (4cr) |  |  |
| [Visual and Performing Arts](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_VisualandPerformingArtsLink.pdf) (3cr) |  |  |
| [Text-Based Humanities](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/SpartanStudies_Text-BasedHumanitiesDistributionLink.pdf) (4cr) |  |  |
| [Natural Science](https://www.ut.edu/uploadedFiles/Academics/Provost/SpartanStudies/Spartanstudies_NaturalScienceDistributionLink.pdf) (4cr) |  |  |

## Mathematics Requirements ( Credits)

### Mathematics Core Requirements

| **Mathematics Core Requirements (45 Credits)** | **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 grade of “C” or higher, or equivalent* |  |  |
| CSC 201 (4cr) – Data Structures and Algorithm Analysis*Pre-requisite: CSC 102 with a grade of “C” or higher, or equivalent* |  |  |
| CSC 220 (4cr) – Operating Systems and Systems Planning*Pre-requisite: CSC 201 with a grade of “C” of higher***or** CSC 230 (4cr) – Software Design and Engineering*Pre-requisite: CSC 201 with a grade of “C” or higher* |  |  |
| MAT 260 (4cr) – Calculus I (1) (Can fulfill Spartan Studies Mathematics Requirement)*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 272 (4cr) – Applied Statistics*Pre-requisite: MAT 225 or MAT 260 with a grade of “C” or higher, or equivalent* |  |  |
| MAT 299 (4cr) – Introduction to Higher Mathematics*Pre-requisite: MAT 262 with a grade of “C” or higher* |  |  |
| MAT 301 (4cr) – Discrete Mathematics*Pre-requisite: MAT 299 with a grade of “C” or higher* |  |  |
| MAT 308 (4cr) – Linear Algebra*Pre-requisite: MAT 299 with a grade of “C” or higher* |  |  |
| MAT 490 (1cr) – Senior Seminar*Pre-requisite: Senior standing in Mathematics, Mathematic with Computer Programing, Data Science, or Actuarial Science. Permission of the department chair required.***or** MAT 495 (1-4cr) – Internship in Mathematics*Pre-requisite: Junior or senior standing with a GPA of 2.25 or higher* |  |  |

### Mathematics Elective Requirements

| **Mathematics Elective Requirements (4 Credits)**Choose one (1) course from the [Mathematics Elective Options.](https://ut.smartcatalogiq.com/en/current/catalog/college-of-social-sciences-mathematics-and-education/department-of-mathematics/mathematics-with-computer-science/mathematics-with-computer-science-major/)*Prerequisites will depend on the courses chosen to fulfill this requirement.* | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| Mathematics Elective Requirement (4cr) |  |  |

### Computer Science Elective Requirements

| **Mathematics Elective Requirements (8 Credits)**Choose two (2) courses from the [Computer Science Elective Options.](https://ut.smartcatalogiq.com/en/current/catalog/college-of-social-sciences-mathematics-and-education/department-of-mathematics/mathematics-with-computer-science/mathematics-with-computer-science-major/)*Prerequisites will depend on the courses chosen to fulfill this requirement.* | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| Computer Science Elective Requirement (4cr) |  |  |
| Computer Science Elective Requirement (4cr) |  |  |