# Unofficial Degree Planning Worksheet Catalog 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

Students must earn 124 hours to be eligible for graduation.

Students must maintain an overall minimum GPA of 3.5 to be eligible for graduation with Honors Distinction.

Students must earn 100 [Academics, Community Service and Engagement](https://ut.smartcatalogiq.com/en/current/catalog/the-ut-academic-experience/honors-program/continuation-in-the-honors-program/) points per year.

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.

## Honors Requirements

### Fundamentum

| **Fundamentum Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 100 (2cr) – Via ad Honores  – must be taken in residency |  |  |
| AWR 101 (4cr) - Reading Locally & Globally  **or** AWR 110 (5cr) – Academic Writing for Multilingual Students |  |  |
| AWR 201 (4cr) – Writing and Research: The Local and the Global  *Pre-requisite (one of the following): AWR 101, AWR 110, or equivalent* |  |  |
| Math (4cr) Requirement (choose one):  MAT 155, MAT 160, or Higher |  |  |

### Honors Core

| **Dialectic Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 220 (4cr) – Where have we been?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 230 (4cr) – Where are we now?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 240 (4cr) – Where are we going?  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |

| **Idea Labs Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 253 (4cr) – Idea Lab: Health Science or Natural Science  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 255 (4cr) – Idea Lab: Humanities/Fine Arts  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |
| HON 257 (4cr) – Idea Lab: Social Science  *Pre-requisite: AWR 101, HON 100*  *Co-requisite: AWR 201* |  |  |

### Honors Thesis

| **Honors Thesis Requirement** | **Course Taken** | **Semester Taken** |
| --- | --- | --- |
| HON 490 (6-10cr) – Thesis  *Pre-requisite: Students must be in good standing in the Honors Program and must have completed 60 credit hours of course work.* |  |  |

## 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) |  |  |