



**TAYLOR**  
UNIVERSITY

## BS in Data Science 2024-2025

Student Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

### Computer Science Core Requirements

_____ COS 120	4	Introduction to Computational Problem Solving
_____ COS 121	4	Foundations of Computer Science
_____ COS 143	3	Interactive Webpage Development
_____ COS 265	4	Data Structures and Algorithms
_____ COS 280	3	Introduction to Artificial Intelligence
_____ COS 326	3	Data Visualization
_____ COS 343	3	Database Systems
_____ SYS 411	3	Machine Learning

### Mathematics Core Requirements

_____ MAT 180	3	Problem Solving
_____ MAT 230	4	Calculus II
_____ MAT 240	4	Calculus III
_____ MAT 255	3	Justifications in Mathematics
_____ MAT 311	3	Introduction to Data Science
_____ MAT 345	4	Linear Algebra
_____ MAT 352	4	Mathematical Statistics
_____ MAT 382	3	Advanced Statistical Methods
_____ MAT 392	1	Mathematics Seminar
_____ MAT 393	3	Practicum
_____ MAT 493	3	Senior Capstone

Select one course from the following:

_____ COS 243	3	Multi-tier Web Application Development
_____ COS 380	3	Natural Language Processing
_____ MAT 310	3	Mathematical Modeling with Numerical Analysis
_____ MAT 340	4	Advanced Calculus
_____ MAT 455	3	Abstract Algebra

### Complete one of the following concentration areas:

#### Biology

_____ BIO 203	4	Principles of Genetics
_____ BIO 306	3	Introduction to Bioinformatics
_____ ENS 204	4	Principles of Ecology

#### Chemistry

Select one course from the following:

_____ CHE 201	4	General, Organic, and Biochemistry I
_____ CHE 211	4	College Chemistry I

Select one course from the following:

_____ CHE 202	4	General, Organic, and Biochemistry II
_____ CHE 212	4	College Chemistry II

Select one course from the following:

_____ CHE 301	4	Analytical Chemistry I
_____ CHE 431	4	Physical Chemistry I

Select one course from the following:

_____ CHE 302	4	Analytical Chemistry II
_____ CHE 432	4	Physical Chemistry II

#### Physics

_____ PHY 211	5	University Physics I
_____ PHY 212	5	University Physics II

Select one course from the following:

_____ PHY 310	3	Modern Physics
_____ PHY 311	4	Modern Physics

Select one course from the following:

_____ PHY 321	3	Electricity and Magnetism
_____ PHY 412	3	Quantum Mechanics

#### Political Science

_____ POS 100	3	American Politics
_____ POS 245	3	Research in Political Studies
_____ POS 331	3	Public Policy
_____ POS 344	3	Campaigns and Elections

#### Psychology

_____ PSY 100	3	Introductory Psychology
_____ PSY 272	3	Research Methods in Psychology
_____ PSY 425	3	Industrial-Organizational Psychology

Select one course from the following:

_____ PSY 321	3	Social Psychology
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#### Sociology

_____ SOC 210	3	Contemporary Social Issues
_____ SOC 250	2	Principles of Research and Analysis
_____ SOC 315	3	Social Inequality and Stratification
_____ SOC 350	3	Social Research Methods

Select one course from the following:

_____ SOC 100	3	Introduction to Sociology
_____ SOC 110	3	Introduction to Global Societies

#### Sport Management

_____ SMA 115	3	Introduction to Sport Management
_____ SMA 210	3	Introduction to Sport Technology and Analytics
_____ SMA 352	3	Event and Facility Management
_____ SMA 354	3	Sport Finance

#### Systems

_____ SYS 101	3	Introduction to Systems
_____ SYS 390	3	Information Systems Analysis
_____ SYS 394	4	Information Systems Design
_____ SYS 401	3	Operations Research

**Total Major Hours Required: 76-83**

Attendance at 15 Mathematics sanctioned events is required.

### Degree Requirements

- 128 minimum hours and 42 minimum upper-division hours (3XX/4XX course numbers).
- Fifty percent of the minimum hours must be completed at Taylor—64 hours.
- Fifty percent of the major/minor hours must be completed at Taylor.
- 22 of the last 30 hours earned must be completed at Taylor.
- Cumulative GPA of 2.0; major GPA of 2.3 (higher GPA may be required in certain curricula). (See current catalog for policy).
- All foundational core, major, minor, and proficiency requirements must be completed (including Senior Comprehensive Exam/Paper/Project).
- Two years of one foreign language is required for the BA degree.
- Candidates for 2 degrees must complete a minimum of 158 semester hours and meet all requirements for 2 different majors.