TAYLOR UNIVERSITY

BS in Physics – 2024-2025

Student Name: _____
Student ID: _____

Major Requirements

_____	PHY 211	5	University Physics I
_____	PHY 212	5	University Physics II
_____	PHY 311	4	Modern Physics
_____	PHY 321	3	Electricity and Magnetism
_____	PHY 322	4	Waves and Physical Optics
_____	PHY 330	2	Advanced Lab
_____	PHY 341	3	Math Methods in Physics and Engineering
_____	PHY 342	3	Analytical Mechanics
_____	PHY 350	4	Thermodynamics and Statistical Mechanics
_____	PHY 412	3	Quantum Mechanics
_____	PHY 413	3	Quantum Mechanics II
_____	PHY 441	3	Advanced Mathematical Methods in Physics
_____	PHY 491	1	Preparation for the Physics GRE
_____	PHY 493	3	Physics Senior Capstone

Select <u>one</u> course from the following:

_____	PHY 393	2	Practicum
_____	PHY 450	2-4	Directed Research

Technical Electives

Select at least <u>8</u> hours from the following:

_____	CHE 431	4	Physical Chemistry I
_____	CHE 432	4	Physical Chemistry II
_____	COS 121	4	Foundations of Computer Science
_____	COS 243	3	Multi-tier Web Application Development
_____	COS 265	4	Data Structures and Algorithms
_____	COS 280	3	Introduction to Artificial Intelligence
_____	COS 284	3	Introduction to Computer Systems
_____	COS 326	3	Data Visualization
_____	ENP 200-499	1-8	*Engineering Physics Elective*
_____	MAT 311	3	Introduction to Data Science
_____	MAT 340	4	Advanced Calculus
_____	MAT 352	4	Mathematical Statistics
_____	MAT 382	3	Advanced Statistical Methods
_____	MAT 455	3	Abstract Algebra
_____	MAT 456	3	Advanced Algebra
_____	MAT 461	3	Real Analysis
_____	PHY 201‡	4	Introductory Astronomy
_____	PHY 300-499	1-8	*Physics Elective*

‡*Special lab section required. Please see catalog course description for more details.*

Additional Major Requirements

_____	CHE 211	4	College Chemistry I
_____	CHE 212	4	College Chemistry II
_____	ENP 104	3	Introduction to Engineering and Software Tools
_____	MAT 151	4	Calculus I
_____	MAT 230	4	Calculus II
_____	MAT 240	4	Calculus III
_____	MAT 251	4	Differential Equations
_____	MAT 345	4	Linear Algebra

Select <u>one</u> course from the following:

_____	COS 120	4	Introduction to Computational Problem Solving
_____	COS 130	3	Computational Problem Solving for Engineers
_____	SYS 120	4	Introduction to Problem Solving

Total Major Hours Required: 90-93

_____ *Participation in a weekend retreat for all students in the department.*

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.