COLLEGE OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

PHYSICS

Bachelor of Science (BS)

This is a guide based on the 2024-2025 Undergraduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on several factors such as dual enrollment, remediation, and summer enrollment. Students will meet with an academic advisor each semester and use Degree Works to monitor their individual progress.

CURRICULUM CHECKLIST

*"Critical Courses" are **italicized and bolded**. Data shows that students who have completed this course in the first two years and have earned the noted grade are most likely to complete this program of study.*

47-58 Hour Major - No minor required

Required Courses:

___ CH195 Chemistry Seminar I (1)
___ CH295 Chemistry Seminar II (2)
___ PH230/030 General Physics I (5)
___ PH231/031 General Physics II (5)
___ PH345 Experimental Methods I (3)
___ PH360 Modern Physics (3)
___ PH370 Mechanics (3)
___ PH371 Electromagnetics (3)
___ PH477 Physics Seminar (1)
___ PH478 Undergraduate Research (1)
___ PH479 Undergraduate Research (2)

Choose one advising track:

General Physics

___ PH473 Quantum Mechanics (3)
___ PH570 Mathematical Physics (3)
___ XXxxx Technical electives (300-599) (12)*

Pre-Medical Physics

___ BI173/073 Cell and Organismal Biology (4)
___ BS113/013 Anatomy & Physiology I (4)
___ BS114/014 Anatomy & Physiology II (4)
___ CH341 Foundations of Organic Chemistry (4)
___ CH342 Organic Chemistry Lab I (1)
___ Physics elective (300-599) (3)
___ XXxxx Technical electives (300-599) (9)*

Computational Physics

___ CS155 Computer Science I (4)
___ CS265 Computer Science II (4)
___ CS300 Computer Science III (3)
___ CS351 C & the Posix Environment (4)
___ PH473 Quantum Mechanics (3)
___ PH570 Mathematical Physics (3)
___ XXxxx Technical electives (300-599) (6)*

Additional Requirements: 30 Hours

___ CH184 General Chemistry I Lab (1)
___ CH185 General Chemistry I (3)
___ CH186 General Chemistry II (3)
___ CH187 General Chemistry II Lab (1)
___ CS101 Introduction to Computer Programming (3)
___ ***MA140 Analytic Geometry & Calculus I (5)***
___ MA145 Analytic Geometry & Calculus II (4)
___ MA244 Analytic Geometry & Calculus III (4)
___ MA345 Linear Algebra (3)
___ MA350 Differential Equations (3)

*Choose from BI/BS/CH/CS/EP/EV/ET/MA/MN/PH 300-599 with advice of advisor.

SAMPLE FOUR-YEAR PLAN

	Fall Semester		Spring Semester	
	Course #	***Hrs***	***Course #***	***Hrs***
FIRST YEAR	UI100	1	CH186	3
	CH184	1	CH187	1
	CH185	3	CH195	1
	CS101	3	MA145	4
	MA140	***5***	PH230/030	5
	General Education	3		
	Total	**16**	**Total**	**14**
SECOND YEAR	MA244	4	CH295	2
	PH231/031	5	MA345	3
	Track course	3-4	MA350	3
	General Education	3	PH360	3
			General Education	3
	Total	**15-16**	**Total**	**14**
THIRD YEAR	PH345	3	PH371	3
	PH370	3	PH478	1
	Track Course	3-4	Track Course	3-4
	General Education	3	Track Course or Elective	2-4
	General Education	3	General Education	3
			Elective	2-3
	Total	**15-16**	**Total**	**14-17**
FOURTH YEAR	PH477	1	Track Course	3-4
	PH479	2	Track Course or Elective	2-4
	Track Course	3-4	General Education	3
	Track Course	3-4	General Education	3
	General Education	3	Elective	2-3
	Elective	4		
	Total	**16-18**	**Total**	**13-17**

Degree requirements for all students: a minimum of 120 credit hours, completion of the General Education program, and completion of 39 senior division hours (300-599). Refer to the Undergraduate Bulletin or Degree Works for additional graduation requirements for your program.

A minimum 2.0 GPA in the major and overall are required to graduate with a BS degree.

General Education Requirements – some requirements may be fulfilled by coursework in major program

- Social and Behavioral Sciences – 6 hours
- Constitution Requirement – 3 hours
- Written Communication – 6 hours
- Oral Communication – 3 hours
- Natural Sciences – 7 hours (from two disciplines, one to include a lab)
- Mathematics – 3 hours
- Humanities & Fine Arts – 9 hours (from at least two disciplines)
- Additional requirements – 5 hours (to include UI100 for native students)
- Civics examination

Revised 2/2/2024

2024-2025 degree map