

# **Required Coursework for Admission**

Course Name	Hrs.	TCCNS	ТАМИ
Engineering Math I	4	MATH 2413	MATH 151
Engineering Math II	4	MATH 2414	MATH 152
Physics - Mechanics	4	PHYS 2425	PHYS 206/226

This transfer course sheet is applicable for applicants applying between August 1<sup>st</sup>, 2024 and October 15<sup>th</sup>, 2025.

• All Required courses should be completed with a grade of B or better.

• Students may have to complete Trigonometry and Pre-Calculus (MATH 2412) at their institution before taking MATH 2413.

• Trigonometry and Pre-Calculus are transferable courses but will not satisfy the Mathematics requirements in this degree plan.

• College Algebra is a transferable course but **will not** satisfy the Mathematics requirements in this degree plan.

The recommendations below represent what a typical TAMU student's schedule looks like during the first four semesters. If working to complete an Associate's Degree before transferring, please align your degree plan to satisfy TAMU degree requirements. You may not have to complete the coursework in the sequence below but this major requires or recommends specific coursework to be completed.

## **First Year**

FALL SEMESTER			SPRING SEMESTER				
TCCNS	TAMU	Course Name	Hrs.	TCCNS	TAMU	Course Name	Hrs.
MATH 2413	MATH 151	Engineering Math I	4	MATH 2414	MATH 152	Engineering Math II	4
COSC 1420	CSCE 206*	C Programming	4	PHYS 2425	PHYS 206/226	Mechanics	4
	<u>core.tamu.edu</u>	Communication Elective**	3	ENGL 1302	ENGL 104	Composition & Rhetoric	3
	<u>core.tamu.edu</u>	American History	3		<u>core.tamu.edu</u>	American History	3
		Total	14			Tota	I 14

• \*Or another elective. Programming classes will serve as a good foundation for PHYS 150 – Intro to Programming for Physics.

• \*\*Any communication elective except THAR 407.

Students may be accepted as a Physics major at TAMU at the end of one year if all criteria have been met. Spring transcripts will be required to determine admission for the following Fall semester.

Students transferring after one year will be on track to begin the 2<sup>nd</sup> year at TAMU with the same classes PHYS majors admitted to TAMU as first-time freshmen will be taking.

## Second Year

FALL SEMESTER*				SPRING SEMESTER*			
TCCNS	ΤΑΜυ	Course Name	Hrs.	TCCNS	ТАМИ	Course Name	Hrs.
PHYS 2426	PHYS 207/227	Electricity and Optics	4	MATH 2320	MATH 308	Differential Equations	3
MATH 2415	MATH 253	Engineering Math III	4		<u>core.tamu.edu</u>	Creative Arts	3
	<u>core.tamu.edu</u>	Language, Philosophy & Culture	3		<u>core.tamu.edu</u>	Social & Behavioral Science	3
GOVT 2305	POLS 206	American National Government	3	GOVT 2306	POLS 207	State & Local Government	3
		Total	14			Total	12

• Consider taking courses that fulfill the 6 hours of <u>International and Cultural Diversity requirement</u> when completing the Language, Philosophy & Culture, Social and Behavioral Sciences, Creative Arts requirements and free electives.



Physics and Astronomy (PHYS) College of Arts and Sciences <u>advising@physics.tamu.edu</u> <u>physics.tamu.edu</u> 2024-2025 Transfer Course Sheet Minimum GPA | 3.0 Minimum Transferable Hours | 24 Maximum Transferable Hours | 90 Second-Choice Major Eligible | YES

# Physics majors at TAMU take major specific courses in the third and fourth semester. Students who transfer after two years will need to complete these after transferring, and time to graduation may be extended.

#### **Coursework Timeline**

- Competitive applicants will have the Required coursework completed by the application deadline.
- Applicants to the summer/fall term **may be** asked to submit spring final grades, this is not a guarantee.
- Summer coursework **will not** be considered for summer/fall applicants.
- Fall coursework will not be considered for spring applicants.
- Applicants to the spring term should have the Required coursework completed by the end of Summer II semester before applying.

#### **Additional Transfer Requirements**

- The Department of Physics and Astronomy is looking for students who are interested in pursuing our degree as a focus. Students should indicate our department as the primary major they are interested in if they wish to be admitted. The essay and supporting materials should reflect that the student is interested in pursuing our degree.
- Meeting minimum requirements does not guarantee admission. The entire record is reviewed for consistency in coursework and grades.

#### **Additional Information**

- Applicants should be serious about earning a degree in Physics.
- Transfer applicants are instructed **NOT** to accept transfer admission to any major with the expectation of later applying for an on-campus change of major.
- The Bachelor of Science will have tracks in Physical Science Teaching, Physics and Mathematics Teaching, Computational Science, Business, Semiconductors and Modern Materials, and Astrophysics. The regular BS and BA degree are still available. The "Required Coursework for Admission" lists the classes needed to transfer into any degree in the Department of Physics and Astronomy. These tracks are designed for students to begin in the 4<sup>th</sup> semester, so most transferring students will not be behind if they choose to pursue a track.

#### **Career & Educational Opportunities**

Physics seeks to understand the fundamental workings of nature, from the constituents of matter deep within the nuclei of atoms, to the most distant galaxies of our expanding universe, to everyday phenomena of emergent complexity, self-organization and chaos. The resulting basic physical knowledge provides a firm foundation for innovations and is often the driving force of advanced technology. Lasers, compact disks, global positioning devices, magnetic resonance imaging machines and gigabit storage media were all made possible by key advances in physics. Physicists have a curiosity that thrives on the challenge of solving problems. Consistent with this, the physics program at Texas A&M strives to teach analytical thinking and quantitative problem-solving skills. This enables students to work productively in physics, in areas closely related to physics, and in a wide variety of areas outside of physics proper. Physicists can be found in almost any discipline that requires complex problem-solving skills. Some engage in cutting-edge research to increase our basic knowledge of the universe. Some apply new-found knowledge to make practical advances in the fields of science, medical science and engineering. Still others use their knowledge to advocate, advise, inform, instruct and administrate as lawyers, consultants, journalists/writers, teachers and managers. For more information please visit <u>careercenter.tamu.edu</u>.

#### **Transfer Course Sheet Notes**

- 1. Admission preference is given to applicants with the highest GPA and the most appropriate courses completed.
- 2. Transfer applicants are encouraged to complete <u>University Core Curriculum</u> coursework found in the <u>Undergraduate Catalog</u> unless specified above.
- 3. This Transfer Course Sheet was supported in a partnership between the Office of Admissions and the College of Arts and Sciences at Texas A&M University with the Undergraduate Catalog having the most extant and definitive information.