

Industrial Engineering
College of Engineering
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engineering.tamu.edu/industrial.html

2023-2024 Transfer Course Sheet Minimum GPA | 3.5

Minimum Transferable Hours | 24 Maximum Transferable Hours | 60 Second-Choice Major Eligible | NO

# **Required Coursework for Admission**

Course Name	Hrs.	TCCNS	TAMU
Engineering Math I	4	MATH 2413	MATH 151
Engineering Math II	4	MATH 2414	MATH 152
Chemistry for Engineering	4	CHEM 1409 or 1412**	CHEM 107/117 or CHEM 120**
Newtonian Mechanics for Engineering and Science	3	PHYS 2425 or 2325	PHYS 206 or 218

Transfer applicants admitted to Texas A&M Engineering with credit for PHYS 2425 (2325/2125) and PHYS 2426 (2326/2126) will only receive 6 credit hours towards their Engineering bachelor's degree if entering AFTER Spring 2018.

- Courses listed should be completed with a grade of B or better.
- All math coursework must have a 3.5 GPA. This GPA will be calculated using ALL attempted math courses, including repeated courses.
- 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 specific coursework to be completed.

## First Year

### **FALL SEMESTER**

TCCNS	TAMU	Course Name		Hrs.
	CHEM 107/117	Chemistry for Engineer	ing	4
MATH 2413	MATH 151	Engineering Math I		4
ENGL 1301 or 1302	core.tamu.edu	ENGL 103 or 104		3
GOVT 2305	POLS 206	Government/Political Science		3
			Total	13

### **SPRING SEMESTER**

TCCNS	TAMU	Course Name	Hrs.
PHYS 2425 or 2325	PHYS 206	Physics – Mechanics*	3
MATH 2414	MATH 152	Engineering Math II	4
	core.tamu.edu	American History	3
GOVT 2306	POLS 207	Government/Political Science	3
		Total	13

#### **Second Year**

## **FALL SEMESTER**

TCCNS	TAMU	Course Name	Hrs.
MATH 2415	MATH 251/253	Calculus III**	3
	STAT 211	Principles of Statistics I	3
PHYS 2426 or 2326	PHYS 207	Electricity and Magnetism for Engineering and Science*	3
	CSCE 206	Structured Programming in C	4

## SPRING SEMESTER

TCCNS	TAMU	Course Name	Hrs.
	MATH 304	Linear Algebra	3
	ISEN 210	Fundamentals of Industrial Engineering Design	4
	MEEN 221	Statics and Dynamics	3
	core.tamu.edu	Social and Behavioral Science or Creative Arts***	3
		Total	13

• \*You may take the four-credit version of PHYS but only three credits will be applied

**Total** 

13

\*\*MATH 253 is an acceptable substitution for MATH 251.

<sup>\*\*</sup>Prospective students attending an institution without an equivalent to CHEM 107/117 can transfer an equivalent to Fundamentals of Chemistry II (CHEM 120 – CHEM 1412) to fulfill the CHEM 107/117 requirement.



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 \*\*\*Consider taking courses that fulfill the 3 hours of <u>International and Cultural Diversity requirement</u> when completing the Social and Behavioral Sciences, free electives and Creative Arts requirements

### **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**

- Transfer applicants should have completed a full semester (spring or fall) course load of 12 transferable hours (minimum) after graduating from high school.
- The Department of Industrial and Systems Engineering 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.
- The strongest applicants will have completed the required calculus sequence, two sciences, and a programming course in either C, C++, Java, or Python.

### **Additional Information**

- Applicants should be serious about earning a degree in Industrial Engineering.
- Communication between applicant and academic advisors in industrial and systems engineering is encouraged.
- Essay should demonstrate expressed interest in the major and/or some indication that the student has experience in the field. If applicable, it should also include an explanation of borderline performance (e.g. medical issues, family crisis, etc.).
- 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.
- Prospective students should refer to the <u>Texas A&M Transfer Course Equivalency</u> website for common course numbers by institution.
- Transfer students should plan on taking the appropriate ENGR coursework for ENGR 102/216/217 at Texas A&M University.

## **Career & Educational Opportunities**

Industrial engineering is an engineering discipline devoted to the design, installation, improvement, and control of integrated systems of people, materials, and facilities in a wide range of organizations that produce goods or render services. Like other engineering fields, industrial engineering is concerned with solving problems through the application of specialized knowledge in mathematics and science, as well as in engineering economics, manufacturing systems, production and inventory control, operations research, quality engineering, reliability, facilities planning and materials handling. An important characteristic of industrial engineering is its system approach to integrate the basic resources of production, people, information, energy and other relevant resources to create a smooth, efficient and competitive operation. Industrial engineers are needed in virtually all enterprises engaged in product design, process planning and scheduling. For more information please visit careercenter.tamu.edu.

### **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 Engineering at Texas A&M University with the Undergraduate Catalog having the most extant and definitive information.