

Blinn-TAMUK Course Map

Associate of Science Degree in Engineering (Blinn) and Bachelor of Science Degrees in Engineering (TAMUK)

Architectural Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Environmental Engineering
Mechanical Engineering
Natural Gas Engineering

A. Core Curriculum - 42 credit hours

The indicated Blinn courses are part of the Blinn Core Curriculum. They also substitute for the corresponding courses in the TAMUK Core Curriculum. Blinn students should note that they give themselves more flexibility in course options by completing the Core Curriculum at Blinn. More importantly, completing the entire Blinn Core Curriculum automatically satisfies the TAMUK Core Curriculum without the need for a course-by-course evaluation.

This course map is based on the TAMUK Core Curriculum adopted for students beginning their studies in the 2017-18 academic year. Current students basing their Blinn studies on earlier versions of the Core Curriculum should consult academic advisors at Blinn and TAMUK, although in nearly all cases the course mapped below will satisfy the Core Curricula in place for several years prior.

Blinn Equivalents			TAMUK BS Engineering Courses		
Course Number	Title	Hours	Course Number	Title	Hours
Communication – 6 credit hours					
ENGL 1301	Composition I	3	ENGL 1301	Rhetoric & Composition I	3
ENGL 1302	Composition II	3	ENGL 1302	Rhetoric & Composition II	3
Mathematics – 3 credit hours (The extra credit hour can be counted against the Component Area Option (Other) at the end of this section. Other mathematics courses required for an engineering degree are listed in sections B and C.)					
MATH 2413	Calculus I	4 (3)	MATH 2413	Calculus I	4 (3)
Life and Physical Sciences – 6 credit hours (Other science courses required for an engineering degree are listed in sections B and C.)					
CHEM 1411 ¹ or CHEM 1470	General Chemistry I or General Chemistry for Engineers	4 (3) or 4(3)	CHEM 1311	Gen. Inorganic Chemistry I	3
PHYS 2425	University Physics I	4 (3)	PHYS 2325	University Physics I	3
Language / Philosophy / Culture – 3 credit hours (select one)					
Various		3	Various	ENGL 2342 or 2362	3

<i>literature courses</i>	ENGL 2323 or 2333		<i>literature courses</i>		
PHIL 1301	Introduction to Philosophy	3	PHIL 1301	Introduction to Philosophy	3
Creative Arts – 3 credit hours (select one)					
ARTS 1303	Art History I	3	ARTS 1303	Art History I	3
ARTS 1304	Art History II	3	ARTS 1304	Art History II	3
DRAM 1310	Introduction to Theater	3	THEA 2310	Introduction to Theatre	3
MUSI 1310	American Music	3	MUSI 2310	History of Rock and Roll	3
American History – 6 credit hours					
HIST 1301	United States History I	3	HIST 1301	American History to 1877	3
HIST 1302	United States History II	3	HIST 1302	American History Since 1877	3
Government/Political Science – 6 credit hours					
GOVT 2305	Federal Government (Federal Constitution and Topics)	3	POLS 2301	Govt. & Politics of U.S	3
GOVT 2306	Texas Government (Texas Constitution and Topics)	3	POLS 2302	Govt. & Politics of Texas	3
Social and Behavioral Sciences – 3 credit hours (select one)					
ECON 2301	Principles of Macroeconomics	3	ECON 2301	Principles of Macroeconomics	3
ECON 2302	Principles of Microeconomics	3	ECON 2302	Principles of Microeconomics	3
PSYC 2301	General Psychology	3	PSYC 2301	Introduction to Psychology	3
SOCI 1301	Introductory Sociology	3	SOCI 1301	Principles of Sociology	3
Component Area Option (Communication) – 3 credit hours					
SPCH 1311	Introduction to Speech Communication	3	COMS 1311	Introduction to Oral Communication	3
Component Area Option (Other) – 3 credit hours (The one extra credit hour from the Mathematics Area is included here.)					
CHEM 1411 ¹ or CHEM 1470	General Chemistry I or General Chemistry for Engineers	4 (1) or 4(1)	CHEM 1111	Gen. Inorganic Chem. I Lab (1)	1
MATH 2413	Calculus I	4 (1)	MATH 2413	Calculus I	4 (1)
PHYS 2425	University Physics I	4(1)	PHYS 2125	University Physics I Lab	1
TOTAL CREDIT HOURS		42	TOTAL CREDIT HOURS		42

¹ Students pursuing a degree in chemical engineering must take CHEM 1411.

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B. Other Blinn courses that contribute to most (see notes in parentheses) engineering degrees at TAMUK

Blinn Equivalents			TAMUK BS Engineering Courses		
Course Number	Title	Hours	Course Number	Title	Hours
ENGR 1201	Introduction to Engineering	2	UNIV 1101 and UNIV 1102	Learning in Global Context I and Learning in Global Context II	2
PHYS 2426	University Physics II	4 (3)	PHYS 2326	University Physics II	3
PHYS 2426	University Physics II	4 (1)	PHYS 2126	University Physics II Lab	1
MATH 2318	Linear Algebra	3	MATH 4341	Linear Algebra and Matrix Methods (<i>Math elective in Architectural, Civil, and Mechanical Engineering; not required for Environmental Engineering and Natural Gas Engineering</i>)	
MATH 2320	Differential Equations	3	MATH 3320	Differential Equations	3
MATH 2414	Calculus II	4	MATH 2414	Calculus II	4
MATH 2415	Calculus III	4	MATH 3415	Calculus III (<i>Math elective in Architectural Engineering and Civil Engineering; not required for Environmental Engineering and Natural Gas Engineering</i>)	4

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C. Blinn courses meeting requirements for specific engineering degrees at TAMUK

The Blinn courses listed below fulfill the corresponding TAMUK courses. There are a few instances – because of course content or a co-requisite requirement – in which a combination of Blinn courses (or a single Blinn course) with more credit hours is used to satisfy a single TAMUK course, thus causing the Blinn student to take more credits than their peers at TAMUK. The student must decide (ideally with the advice of his/her Blinn academic advisor and the TAMUK College of Engineering Academic Advisor) if this is in his/her best interest. Blinn students always have the option of completing these courses at TAMUK rather than Blinn to avoid accumulating the extra credit hours.

Blinn Equivalents			TAMUK BS Engineering Courses		
Course Number	Title	Hours	Course Number	Title	Hours
Architectural Engineering					
BIOL 1406 or GEOL 1403	Biology for Science Majors I or Physical Geology	4 (3) or 4 (3)	BIOL 1306 or GEOL 1303	General Biology I or Physical Geology	(science elective; select one) 3
ENGR 1304	Engineering Graphics I	3	AEEN 1310	Computer-Based Graphics and Design I	3
ENGR 2301	Engineering Mechanics - Statics	3	CEEN 2301	Mechanics I – Statics	3
Chemical Engineering					
BIOL 1406	Biology for Science Majors I	4 (3)	BIOL 1306	General Biology I	3
CHEM 1412	General Chemistry II	4 (3)	CHEM 1312	Gen. Inorganic Chemistry II	3

CHEM 1412	General Chemistry II	4 (1)	CHEM 1112	Gen. Inorganic Chem. II Lab	1
CHEM 2423	Organic Chemistry I	4(3)	CHEM 3323	Organic Chemistry I	3
CHEM 2423	Organic Chemistry I	4(1)	CHEM 3123	Organic Chemistry I Lab	1
CHEM 2425	Organic Chemistry II	4(3)	CHEM 3325	Organic Chemistry II	3
CHEM 2425	Organic Chemistry II	4(1)	CHEM 3125	Organic Chemistry II Lab	1
Civil Engineering					
BIOL 1406 or GEOL 1403	Biology for Science Majors I or Physical Geology	4 (3) or 4 (3)	BIOL 1306 or GEOL 1303	General Biology I or Physical Geology	<i>(science elective; select one)</i> 3
ENGR 1304	Engineering Graphics I	3	AEEN 1310	Computer-Based Graphics and Design I	3
ENGR 2301	Engineering Mechanics - Statics	3	CEEN 2301	Mechanics I - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MEEN 2302	Mechanics II (Dynamics)	3
ENGR 2304 or COSC 1436	Programming for Engineers or Programming Fundamentals I	3 or 3	Varies	Computer Elective	3
Electrical Engineering					
ENGR 2301 and ENGR 2302	Engineering Mechanics - Statics (3) and Engineering Mechanics - Dynamics (3)	6 (3+3)	MEEN 2355	Statics and Dynamics of Rigid Bodies	<i>(approved elective)</i> 3
COSC 1436	Programming Fundamentals I	3	CSEN 2304	Introduction to Computer Science	3
ENGR 2406	Introduction to Digital Systems	4 (3)	EEEN 2340	Digital Logic Design	3
Environmental Engineering					
BIOL 1406	Biology for Science Majors I	4 (3)	BIOL 1306	General Biology I	3
CHEM 1412	General Chemistry II	4 (3)	CHEM 1312	Gen. Inorganic Chemistry II	3
CHEM 1412	General Chemistry II	4 (1)	CHEM 1112	Gen. Inorganic Chem. II Lab	1
CHEM 2423	Organic Chemistry I	4(3)	CHEM 3323	Organic Chemistry I	3
CHEM 2423	Organic Chemistry I	4(1)	CHEM 3123	Organic Chemistry I Lab	1

ENGR 1304	Engineering Graphics I	3	MEEN 1310	Computer Based Graphics and Design I	3
ENGR 2301 and ENGR 2302	Engineering Mechanics - Statics(3) and Engineering Mechanics - Dynamics (3)	6 (3+3)	MEEN 2355	Statics and Dynamics of Rigid Bodies	3
ENGR 2304 or COSC 1436	Programming for Engineers or Programming Fundamentals I	3 or 3	EVEN 2304	Computer Methods for Environmental Engineering	3
Mechanical Engineering					
ENGR 1304	Engineering Graphics I	3	MEEN 1310	Computer Based Graphics and Design I	3
ENGR 2301	Engineering Mechanics - Statics	3	CEEN 2301	Mechanics I - Statics	3
ENGR 2302	Engineering Mechanics - Dynamics	3	MEEN 2302	Mechanics II (Dynamics)	3
ENGR 2304	Programming for Engineers	3	MEEN 1320	Elementary Numerical Methods & Engineering Problem Solving	3
Natural Gas Engineering					
CHEM 1412	General Chemistry II	4 (3)	CHEM 1412	General Chemistry II	4 (3)
CHEM 1412	General Chemistry II	4 (1)	CHEM 1412	General Chemistry II	4 (1)
CHEM 2423	Organic Chemistry I	4(3)	CHEM 3323	Organic Chemistry I	3
CHEM 2423	Organic Chemistry I	4(1)	CHEM 3123	Organic Chemistry I Lab	1
GEOL 1403	Physical Geology	4(3)	GEOL 1303	Physical Geology	3
GEOL 1403	Physical Geology Laboratory	4(1)	GEOL 1103	Physical Geology Lab	1
ENGR 2301 and ENGR 2302	Engineering Mechanics - Statics(3) and Engineering Mechanics - Dynamics (3)	6 (3+3)	MEEN 2355	Statics and Dynamics of Rigid Bodies	3