



WSU Tech to Wichita State: Associate of Arts (AA) to Bachelor of Science (BS) in Biomedical Engineering [E18B]

➡ General Education: Wichita State University Policy

	WSU Course	WSU Tech Course	CR	Grade	Sem/YR	Notes
Foundation Courses Must be completed with a C- or better within the first 48 hours of college coursework.	ENGL 101 College English 1	ENG 101 Composition I	3			
	ENGL 102 College English 2	ENG 120 Composition II	3			
	COMM 111 Public Speaking	SPH 101 Public Speaking	3			
	MATH 111 College Algebra AA Requirement only.	MTH 112 College Algebra	3			Students who place into Trig or Calc do not need Coll. Alg.
Divisional Courses	Fine Arts	ART 100, MUS 110 or THR 100	3			
	Humanities – PHIL 385	No Equivalent	3			300+ level course
	Social/Behavioral Science –		3			
	Math & Natural Science – MATH 242	MTH 125 Calculus I	5			
Additional Courses At least 9 hours must be numbered 300 or higher	Gen Ed Division 1 – MATH 243	MTH 150 Calculus II	5			M/NS. See Tech advisor for limited availability.
	Gen Ed Division 2 –		3			Non-M/NS. 300+ level course
	Gen Ed Any Division – CHEM 211	CHM 125 Chemistry I	5			
	Gen Ed Any Division – PHYS 313 & 315	No Equivalent	5			300+ level course

NOTE: Students who have completed an AA or AS through a Kansas Community College may choose to fulfill general education requirements by completing two 300-level courses at Wichita State University.

➡ Math and Natural Science Requirements

	WSU Course	WSU Tech Course	CR	Grade	Sem/YR	Notes
These courses may also be listed in the general education requirements	BIOL 210 Gen. Biology	BIO 130 Gen. Biology	4			Gen Ed. See Tech advisor for limited availability.
	BIOL 223 Human A&P	BIO 150 Human A&P	5			Gen Ed.
	BIOL 420 or CHEM 611	No Equivalent	3-4			
	CHEM 211 Gen Chem I	CHM 125 Chem I	5			Gen Ed.
	CHEM 212 Gen Chem II	CHM 135 Chem II	5			Gen Ed.
	CHEM 533 Elm. Org. Chem. <i>Spring Only.</i>	No Equivalent	3			
	MATH 242 Calculus I	MTH 125 Calculus I	5			Gen Ed
	MATH 243 Calculus II	MTH 150 Calculus II	5			Gen Ed. See Tech advisor for limited availability.
	MATH 555 Diff. Eq.	No Equivalent	3			
	PHYS 313 Physics for Scientists I	No Equivalent	4			
	PHYS 314 Physics for Scientists II	No Equivalent	4			

➡ Engineering Core

	WSU Course	WSU Tech Course	CR	Grade	Sem/YR	Notes
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SHOCKER PATHWAY



Non-BME engineering requirements	AE 223 Statics	No Equivalent	3			
	EE 282/L Circuits I w/ lab	No Equivalent	4			
	IME 254 Engr. Probability & Statistics	No Equivalent	3			
	IME 255 Engineering Economy	No Equivalent	3			
	ME 398 Thermodynamics I	No Equivalent	3			
	PHIL 385 Engineering Ethics*	No Equivalent	3			

*Students will need to earn credit for PHIL 385 to complete gen eds for the AA degree. Students must reach jr/sr status before taking this course.

➔ Biomedical Engineering Courses

WSU Course	WSU Tech Course	CR	Grade	Sem/YR	Notes
BME 115 Biomedical Engineering Seminar	No Equivalent	0			
BME 335 Biomedical Computer Apps.	No Equivalent	3			
BME 452 Biomechanics	No Equivalent	3			
BME 462 Introduction to Biofluids	No Equivalent	3			
BME 477 Intro to Biomaterials	No Equivalent	3			
BME 480 Bioinstrumentation <i>Spring Only</i>	No Equivalent	3			
BME 482 Design of Biodevices	No Equivalent	3			
BME 585 Capstone Design I <i>Fall Only</i>	No Equivalent	3			
BME 595 Capstone Design II <i>Spring Only</i>	No Equivalent	3			
Engineering Technical Electives**	No Equivalents	15			
Open Technical Elective **					

**Students must complete 18 credit hours of technical electives, selected from a combination of a required BME concentration and the approved list of technical electives. At least 6 of the 18 credit hours must be from a selected BME concentration, and at least one course taken in the BME concentration must be a BME course.

➔ Engineering+ Program requirements

Students must select 3 of the 7 options listed here to meet Engineering+ requirements.	Cooperative Education or Internship
	Entrepreneurship and Innovation
	Global Learning or Study Abroad
	Multidisciplinary Education
	Undergraduate Research
	Leadership
	Service Learning

Consult the Wichita State Undergraduate Catalog for detailed information and how to satisfy each Engineering+ option. Other information found at www.wichita.edu/engineering+

➔ Connect with Shocker Pathway Resources

www.wichita.edu/academics/adult_learning/shocker_pathway.php

Instagram: ShockerPathwayWSU Twitter: @ShockerPathway Facebook: @WSUShockerPathway

➔ AA Graduation Requirements

- Earn credit for **60** cumulative hours.
- Earn a minimum of **15** hours at WSU.
- Earn a minimum of **48** hours in Liberal Arts and Sciences coursework.
- Complete all general education requirements.



Maintain an overall, WSU and cumulative GPA of 2.00 or higher.

➔ BS in Biomedical Engineering Graduation Requirements

Earn credit for **128** cumulative hours.

Earn credit in a minimum of **60** hours at a 4-year institution.

Earn credit in a minimum of **45** hours of upper-division coursework.

Complete all general education requirements.

Maintain an overall, WSU, and program GPA of 2.00 or higher.

At least 24 of last 30 or 50 of last 60 credit hours must be completed at WSU.

➔ Advising Resources

WSU Tech Academic Advisor:

Shelby Berry

Phone: 316.677.1727

Email: ssmith42@wsutech.edu

BME Advising

Maria Lucas

Wallace Hall, Room 108A

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BME Department

Wallace Hall, Room 108

316.978.7582

➔ Suggested Course Sequence at WSU Tech for WSU Gen Ed Policy

	WSU Tech Course	CR	Prerequisite	Notes
WSU Tech Semester 1	ENG 101 Composition I	3	Entrance Score	If not eligible for ENG 101 take first available ENG course.
	MTH 112 College Algebra	3	Entrance Score	If student places into Trig or Calculus, student does not need to start w/ College Algebra. Math sequence should be top priority for Engineering students.
	BIO 150 Human A&P	5	See Tech Advisor	
	Social/Behavioral Science	3		See pre-medical check sheet for suggested courses.
WSU Tech Semester 2	ENG 120 Composition II	3	Min C in ENG 101	
	MTH 113 College Trigonometry	3	Score or Min C in MTH 112	If student places into Calculus, student does not need to take Trig.
	CHM 125 Chemistry I	5		
	Fine Arts	3		
WSU Tech Semester 3	SPH 101 Public Speaking	3		
	MTH 125 Calculus I	5		Take at WSU if not offered at Tech.
	CHM 125 Chemistry II	5		
	Additional Gen. Ed. Course Div. 2	3		Suggested 300+ S/BS; see pre-medical sheet for options
	ORI 003 Shocker Pathway Transfer	0		
Wichita State Semester 4	MATH 243 Calculus II	5		
	PHYS 313 Physics for Scientists I	4		
	BIOL 210 General Biology I	4		
	BME 115 Biomedical Engr Seminar	3		