

WSU Tech to Wichita State: Associate of Arts (AA) to Bachelor of Science (BS) Product Design & Manufacturing Engineering, [E15D]

General Education: Wichita State University Policy

	WSU Course	WSU Tech Course	CR	Grad e	Sem/YR	Notes
Foundation	ENGL 101 College English 1	ENG 101 Composition I	3			
Courses	ENGL 102 College English 2	ENG 120 Composition II	3			
Must be	COMM 111 Public Speaking	SPH 101 Public Speaking	3			
completed with a C- or better within the first 48 hours of college coursework.	MATH 111 College Algebra AA Requirement only.	MTH 112 College Algebra	3			Students who place into Trig or Calc do not need College Algebra.
Divisional	Fine Arts	ART 100, MUS 110 or THR 100	3			
Courses	Humanities – PHIL 385 Engineering Ethics	No Equivalent	3			300+ level course
	Social/Behavioral Science –		3			
	Math & Natural Science – MATH 242	MTH 125 Calculus I	5			
Additional	Gen Ed Div. 1 – CHEM 211	CHEM 125 Chemistry I	5			M/NS.
Courses	Gen Ed Div. 2 – Non-M/NS		3			300+ level course
At least 9 hours must be	Gen Ed Any Div. – PHYS 313 & 315	No Equivalent	5			300+ level course
numbered 300 or higher	Gen Ed Any Div. – PHYS 314 & 316	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	Grad e	Sem/YR	Notes
Some of these	CHEM 211 Gen. Chemistry I	CHM 125 Chemistry I	5			
courses may	MATH 242 Calculus I	MTH 125 Calculus I	5			
also be listed	MATH 243 Calculus II	MTH 150 Calculus II	5			
in the general education	MATH 451 Computational Math Using MATLAB	No Equivalent	3			
requirements	MATH 555 Diff. Equations	No Equivalent	3			
requirements	PHYS 313 & 315 Physics for Scientists I w/ Lab	No Equivalent	5			
	PHYS 314 Physics for Scientists II	No Equivalent	4			

Engineering Core

WSU Course	WSU Tech Course	CR	Grad e	Sem/YR	Notes



WSU TECH W WSU VI

Non-PDME	AE 223 Statics	No Equivalent	3		
engineering	AE 333 Mechanics of Materials	No Equivalent	3		
requirements	EE 282/L Circuits I w/ Lab	No Equivalent	4		
	ME 250 & ME 251 Materials	No Equivalent	4		
	Engineering w/ Lab		4		

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Product Design & Manufacturing Engineering Courses

WSU Course	WSU Tech Course	CR	Grad e	Sem/YR	Notes
IME 222/L Engineering Graphics w/ Lab	No Equivalent	3			
IME 254 Probability & Statistics I	No Equivalent	3			
IME 255 Engineering Economy	No Equivalent	3			
IME 258/L Manufacturing Methods I/Lab	No Equivalent	4			
IME 425 Kinematic & Dynamic Design	No Equivalent	3			Fall only
IME 553 Production Systems	No Equivalent	3			
IME 554 Statistical Quality Control	No Equivalent	3			Fall only
IME 558 Manufacturing Methods II & Lab	No Equivalent	4			
IME 561 Applied Control Systems	No Equivalent	3			Fall only
IME 625 Robust Product Design	No Equivalent	3			Spring only
IME 761 Robot Programming & Applications	No Equivalent	3			Spring only
IME 788 Rapid Prototyping w/ 3D Printing	No Equivalent	3			
IME 590 Industrial Engineering Design I	No Equivalent	3			
IME 690 Industrial Engineering Design I	No Equivalent	3			
IME 676 Aircraft Manufacturing & Assembly	No Equivalent	3			Summer only
Technical Electives	Some Equivalents Exist	15			

Engineering+ Program requirements

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



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 Mechanical 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

PDME Advising

Maria Lucas, Academic Advisor Wallace Hall, Room 108A

316-978-2826

IMEadvising@wichita.edu

ISME Department

Engineering Building, Room 120

316-978-3425



Connect with Shocker Pathway Resources

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

Instagram: ShockerPathwayWSU Twitter: @ShockerPathway Facebook: @WSUShockerPathway



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.
	CHM 125 Chemistry I	5	See Tech Advisor	
	Social/Behavioral Science	3		
WSU Tech	ENG 120 Composition II	3	Min C in ENG 101	
Semester 2	MTH 113 College Trigonometry	3	Score or Min C in MTH 112	If student places into Calculus, student does not need to take Trig. Math sequence should be top priority for Engineering students. Take math every semester.
	SPH 111 Public Speaking	3		
	Fine Arts	3		
	Additional Gen Ed – 2 nd Division	3		Suggested 300+ S/BS.
WSU Tech Semester 3	MTH 125 Calculus I	5	Score or MTH 113 w/ C	
	Engineering+	3		
	Technical Electives	6		
	ORI 003 Shocker Pathway Transfer	0		
Courses to	PHIL 385 Engineering Ethics	3	Jr/Sr Standing	
Finish AA at	MATH 243 Calculus II	5	MATH 242 w/ C	
WSU	PHYS 313/315 Physics for Scientists I w/ Lab	5	C: MATH 243	



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PHYS 314/316 Physics for Scientists II w/ Lab 5 MATH 243 and PHYS 313.						