WSU Tech to Wichita State: Associate of Arts (AA) to Bachelor of Science (BS) in Computer Engineering, [E17A]

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 College Algebra.
Divisional Courses	Fine Arts	ART 100, MUS 110 or THR 100	3			
	Humanities – PHIL 354	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 Div. 1 – MATH 243	MTH 150 Calculus II	5			See Tech advisor for limited availability.
	Gen Ed Div. 2 –		3			Non-M/NS. 300+ level course
	Gen Ed Any Div.– PHYS 313	No Equivalent	4			300+ level course
	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	Grade	Sem /YR	Notes
These courses may also be listed in the general education requirements	MATH 242 Calculus I	MTH 125 Calculus I	5			
	MATH 243 Calculus II	MTH 150 Calculus II	5			
	MATH 321/CS 321 Discrete Structures I	No Equivalent	3			
	MATH 511 Linear Alg.	No Equivalent	3			
	MATH 555 Differential Equations	No Equivalent	3			
	PHYS 313 Physics for Scientists I	No Equivalent	4			
	PHYS 314/316 Physics for Scientists II w/ lab	No Equivalent	5			

Engineering Core

	WSU Course	WSU Tech Course	CR	Grade	Sem/YR	Notes
Non-CE engineering requirements	EE 282/L Circuits I w/ lab	No Equivalent	4			
	EE 284 Circuits II	No Equivalent	3			
	EE 285 L Programming w/ MATLAB for EECS	No Equivalent	1			
	EE 492 Electronic Circuits I	No Equivalent	4			
	EE 585 Senior Design Project I	No Equivalent	2			
	EE 595 Senior Design Project II	No Equivalent	2			
	IME 254 Engr. Probability & Stats	No Equivalent	3			
	IME 255 Engineering Economy	No Equivalent	3			
	ME 398 Thermodynamics I	No Equivalent	3			
	PHIL 354 Ethics and Computers	No Equivalent	3			*Gen Ed.*

Computer Engineering Courses

WSU Course	WSU Tech Course	CR	Grade	Sem/YR	Notes
CS 194 Intro to Digital Design	No Equivalent	3			
CS 211 Intro to Programming	No Equivalent	4			
CS 238 Assembly Language Programming	No Equivalent	3			
CS 311 Object-Oriented Programing	No Equivalent	4			
CS 388 FPGA-Based System Design	No Equivalent	4			
CS 400 Data Structures	No Equivalent	3			
CS 394 Intro to Computer Architecture *Spring Only*	No Equivalent	3			
CS 540 Operating Systems	No Equivalent	3			
CS 594 Microprocessor-Based Sys. Design *Fall Only*	No Equivalent	4			
CS 664 Computer Networks *Spring Only*	No Equivalent	3			
Technical Electives*		14			

*Select 14 credit hours which must be chosen with advisor's approval from a departmentally approved list. At least 12 of the 14 credit hours must be from the ECE department. Up to 2 credit hours of co-op can be used as non-departmental technical electives.

Engineering+ Program

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

See the Undergraduate Catalog for detailed information. Info also available 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**

SHOCKER PATHWAY

WSU TECH WICHITA STATE UNIVERSITY

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 Computer Engineering Graduation Requirements

Earn credit for **124** 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 Advisor
Shelby Berry
Phone: 316.677.1727
ssmith42@wsutech.edu

ECE Advising
Daniela Blair, Academic Advisor
316.978.2822
Daniela.blair@wichita.edu

ECE Department
Wallace Hall, Room 300
316.978.325

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.
	SPH 101 Public Speaking	3		
	Fine Arts	3		
	Social/Behavioral Science	3		
WSU Tech Semester 2	ENG 120 Composition II	3	Min C in ENG 101	
	MTH 113 College Trigonometry	3	Min C in MTH 112	If student places into Calculus, does not need Trig.
	Additional Gen Ed – Division 2	3		Non-M/NS, suggested 300+.
	Technical Elective	3+		Suggested CHM 125 or BUS 200
	ORI 003 Shocker Pathway Transfer	0		
WSU Semester 3	MATH 242 Calculus I	5	MTH 113 w/ C or score	MTH 125 @ Tech if Available
	CS 194 Intro to Digital Design	4	MTH 112 w/ C or better	
	CS 211 Intro to Programming	4	MTH 112 w/ C or better	
Courses at WSU to Finish AA	MATH 243 Calculus II	5	MATH 242 w/ C or better	
	PHYS 313 Physics for Scientist I	4	C: MATH 242	
	ECE 282 Circuits I or CS 311 Object-Oriented Programing	4	CS 211 w/ C or better	
	PHYS 314 & 316 Physics for Scientists II w/ Lab	5	PHYS 313 & MATH 243 w/ C or better	
	PHIL 354 Ethics and Computers	3	Jr/Sr Standing	