

ASSOCIATE OF SCIENCE TRANSFER DEGREE - effective 2022-2023
Engineering emphasis (64 credit hours)

Minimum 2.00 Cumulative Grade Point Average for A.S. Degree. 15 hour residency requirement.

		Course Areas/Titles	Course Numbers	Done	Now	Need	
A.S. Engineering emphasis GENERAL EDUCATION OPTIONS AND REQUIREMENTS (27 credit hours) <small>MOTR CORE 42 completion not required for A.S. degree</small>	Communications	3 hours	<i>Written Communications</i>	ENG 101(H)			
	Humanities and Fine Arts AND/OR Social and Behavioral Sciences	3 hours	<i>Civics</i>	HST 103(H), 104(H); PSC 102(H)			
			<i>PSC001 MO Higher Ed Civics Exam must also be completed</i>				
		3 hours	<i>Economics</i>	ECO 101, 102			
		3 hours	<i>Art</i>	ART 101, 103, 105			
			<i>Civilization</i>	HST 201, 202			
			<i>Foreign Language</i>	FRN 101, 102; GRM 101, 102; SPN 101, 102			
			<i>Literature</i>	ENG 105, 106, 215(H), 216(H), 225, 226, 228, 229			
			<i>Geography</i>	GEO 103			
			<i>Music</i>	MSC 101, 131, 133, 231, 232			
<i>Philosophy/Religion</i>			PHL 101, 102(H), 201, 202(H)				
<i>Political Science</i>	PSC 155						
<i>Psychology</i>	PSY 101(H)						
<i>Sociology</i>	SOC 101(H)						
<i>Theatre</i>	THT 100(H)						
Mathematical Sciences	5 hours	<i>Mathematical Sciences</i>	MTH 180 (not a MOTR course but meets general education requirement for math)				
Natural Sciences	10 hours with 2 labs*	<i>Physical Sciences</i>	CHM 111(H)*				
			PHY 223*				
A.S. Engineering emphasis DEGREE ELECTIVE OPTIONS AND REQUIREMENTS (37 hours)	Institutional Requirements	Computer Literacy met with required Engineering emphasis General Education course PHY223			Required course listed above		
		First Year Experience (FYE 1 hr)	Exploring the Field of Engineering	EGR 100 (counts as elective degree requirement)			
	REQUIRED ENGINEERING COURSES	18 hours	Calculus II (5)	MTH 185			
			Calculus III (5)	MTH 201			
			Differential Equations (3)	MTH 205			
			General Physics II (5)	PHY 224			
	Associate of Science Technical Elective Options	19** hours (Including FYE course)	Biology for Majors I (4)	BIO 103			
			Genetics (4)	BIO 201			
			General Chemistry II (5)	CHM 112			
			Organic Chemistry I (5)	CHM 200			
			Organic Chemistry II (5)	CHM 201			
			Advanced Communications (3)	COM 110 or ENG 102(H)			
			Introduction to Computer Programming (3)	CIS 155			
			Computer Aided Engineering Design (3)	EGR 101			
			Engineering Mechanics-Statics (3)	EGR 228			
Engineering Mechanics-Dynamics (3)			EGR 250				
Circuit Analysis I (3)			EGR 261				
Introduction to Statistics (3)			MTH 132				
Linear Algebra (3)			MTH 172				
Introduction to Metallurgy (3)	MTT 148						
Physical Geology (4)	PHY 105						
MOTR Humanities or Social Behavioral Science as needed by transfer institution (3)	Humanities/Social Sciences						
TOTAL A.S. Engineering emphasis degree credit hours (at least 64 hours required)							
Institution Student Plans to Transfer to and Major Area of Study:							
Student Signature/Date:							
Advisor Signature/Date:							

Total may vary depending on major areas of study requirements related to specific Engineering discipline: Aerospace, Agricultural, Ceramic, Chemical, Civil, Electrical, Engineering Management, Food Biochemical and Environmental, Geological, Geology and Geophysics, Industrial, Mechanical, Metallurgical, Mining, Nuclear, and Petroleum Engineering. **Consult your Engineering Advisor and 4-year transfer institution for assistance in selecting courses for your specific degree, major, and transfer institution requirements.