

**JEFFERSON COLLEGE**  
**ASSOCIATE OF SCIENCE TRANSFER DEGREE** - effective 2019-2020  
**Engineering emphasis (64 credit hours)**

Minimum 2.00 Cumulative Grade Point Average for A.S. Degree. 24 hour residency requirement.

		Course Areas/Titles	Course Numbers	Done	Now	Need	
<b>A.S. Engineering emphasis GENERAL EDUCATION OPTIONS AND REQUIREMENTS (27 credit hours)</b> MOTR CORE 42 completion not required for A.S. degree	Communications	3 hours	Written Communications	ENG 101(H)			
	Humanities and Fine Arts AND/OR Social and Behavioral Sciences	3 hours	Civics	HST 103(H), 104(H); PSC 102(H)			
			PSC001 MO Higher Ed Civics Exam must also be completed				
		3 hours	Economics	ECO 101, 102			
		3 hours	Art	ART 101, 103, 105			
			Civilization	HST 201, 202			
			Foreign Language	FRN 101, 102; GRM 101, 102; SPN 101, 102			
			Literature	ENG 105, 106, 215(H), 216(H), 225, 226, 228, 229			
			Geography	GEO 103			
			Music	MSC 101, 131, 133, 231, 232			
Philosophy/Religion			PHL 101, 102(H), 201, 202(H)				
Political Science	PSC 155						
Psychology	PSY 101(H)						
Sociology	SOC 101(H)						
Theatre	THT 100(H)						
Mathematical Sciences	5 hours	Mathematical Sciences	MTH 180 (not a MOTR course but meets general education requirement for math)				
Natural Sciences	10 hours with 2 labs*	Physical Sciences	CHM 111(H)*				
			PHY 223*				
<b>A.S. Engineering emphasis DEGREE ELECTIVE OPTIONS AND REQUIREMENTS (37 hours)</b>	Institutional Requirements	<b>Computer Literacy met with required ENGINEERING emphasis General Education course PHY223</b>			Required course listed above		
		<b>First Year Experience (FYE 1-3 hrs)</b>	Freshman Seminar; Intro. to College; Mastering College Exp.	COL100, 101, 136 (counts as elective degree requirement)			
	REQUIRED ENGINEERING COURSES	27 hours	Calculus II (5)	MTH 185			
			Calculus III (5)	MTH 201			
			Differential Equations (3)	MTH 205			
			General Physics II (5)	PHY 224*			
			Introduction to Computer Programming (3)	CIS 155			
			Computer Aided Engineering Design (3)	EGR 101			
			Engineering Mechanics-Statics (3)	EGR 228			
	Associate of Science Technical Elective Options	9** hours	General Chemistry II (5)	CHM 112			
Organic Chemistry I (5)			CHM 200				
Engineering Mechanics-Dynamics (3)			EGR 250				
Circuit Analysis I (3)			EGR 261				
Linear Algebra (3)			MTH 172				
Introduction to Metallurgy (3)			MTT 148				
Physical Geology (4)			PHY 105				
Advanced Communications (3)			COM 110 or ENG 102(H)				
<b>TOTAL A.S. Engineering emphasis degree credit hours (at least 64 hours required)</b>							
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.**