ENGINEERING ACADEMIC GUIDE 2021-2022

This Academic Plan is a semester-by-semester plan for the full-time college-ready student. Part-time students should work with an advisor to customize the map to fit individual needs. Plan includes minimum 27 general education credit hours (with at least 22 credit hours) and minimum 64 total credit hours required for Associate of Science with Engineering emphasis (A.S.) transfer degree.

ACADEMIC PLAN			NOTES
Fall 1st Year		**Cr Hrs**	**Semester 1**
AS	MTH180 Calculus I (or MTH 141 Precalculus if required)	5	
Elective	COL101 Introduction to College	1	
AS	CIS155 Intro to Computer Programming	3	
	CHM111 General Chemistry I (or CHM 101 Intro to Chemistry if required)	5	
	ENG101 Composition I	3	
	Total Credit Hours	**17**	
Spring 1st Year		**Cr Hrs**	**Semester 2**
AS	MTH185 Calculus II (or MTH180 Calculus I if not taken in Fall)	5	Spring AS Electives: COM110 Public Speaking (3) ENG102 English Composition II (3) PHY105 Physical Geology (4) Elective: MTT148 Intro to Metallurgy (3) *Associate of Science electives: must take at least 9 credit hours total. Students should see their advisors to determine the best schedule for their specific engineering disciplines. **See degree plan for an extensive list of humanities or social/behavioral science electives.
	Associate of Science Elective* or CHM111 General Chemistry I if not taken in Fall	3 - 5	
AS	EGR101 Computer-Aided Engineering Design	3	
	HST103 U.S. History I	3	
	Humanities or Social/Behavioral Science Elective **	3	
	Total Credit Hours	**17 - 19**	
Summer 1st Year		**Cr Hrs**	
AS	MTH185 Calculus II (if not taken in Spring)	5	
	Total Credit Hours	**0 - 5**	
Fall 2nd Year		**Cr Hrs**	**Semester 3**
AS	MTH201 Calculus III	5	Fall AS Electives: Elective: CHM200 Organic Chemistry I (5) Elective: MTH172 Linear Algebra (3) ENG102 Composition II (3) COM110 Public Speaking (3) PHY105 Physical Geology (4) Elective: MTT148 Intro to Metallurgy (3) *Associate of Science electives: must take at least 9 credit hours total. Students should see their advisors to determine the
	PHY223 Physics I	5	
Elective	Associate of Science Elective*	3-5	
AS	EGR228 Engineering Statics	3	
	Total Credit Hours	**16-18**	

			best schedule for their specific engineering disciplines.

	Spring 2nd Year	Cr Hrs	Semester 4
AS	MTH205 Differential Equations	3	Spring AS Electives:
AS	PHY224 Physics II	5	Elective: CHM112 General Chemistry II (5)
	ECO101 Macroeconomics	3	Elective: EGR250 Engineering Dynamics (3)
Elective	Associate of Science Elective*	3-5	Elective: EGR261 Circuit Analysis (3)
	Total Credit Hours	**14-16**	ENG102 Composition II (3)
			COM110 Public Speaking (3)
			PHY105 Physical Geology (4)
			Elective: MTT148 Intro to Metallurgy (3)

*Associate of Science electives: must take at least 9 credit hours total. Students should see their advisors to determine the best schedule for their specific engineering disciplines.

Jefferson College

ENGINEERING ACADEMIC GUIDE 2021-2022

Program Description: The Physics/Engineering program provides students with important background courses in Physics and Engineering principles with which they can pursue more specialized advanced courses. This enables our students to transfer to a four-year institution as juniors and be successful in their pursuit in a variety of engineering fields.

Admission Requirements:

Department Faculty Advisors: Bob Brazzle

Associate Dean: Maryanne Angliongto

Employment Outlook/Median Salary:

Career	Degree Level	** Growth	Median Annual Salary*
Electrical engineer	B.S.	4%	$89,630
Mechanical engineer	B.S.	5%	$80,580
Civil engineer	B.S.	20%	$79,340
Aerospace engineer	B.S.	7%	$103,720
Petroleum engineer	B.S.	26%	$130,280

**Employment information based on current Bureau of Labor Statistics Occupational Outlook Handbook. See http://www.usatoday.com/story/money/personalfinance/2015/01/31/cheat-sheet-highest-paying-degrees/22478439/. and http://www.payscale.com/college-salary-report-2013/majors-that-pay-you-back*

***Projected % of change in employment 2012-2022; the average for all occupations is 11%, see http://www.bls.gov/news.release/ecopro.t07.htm*

Jefferson College Program Highlights:

Transfer Information: Jefferson College has articulation agreements with the following four-year institutions:

Missouri University of Science and Technology (MST)

The above list is not comprehensive and is subject to change. Additional information about transferring to four-year institutions can be found here.