

Associate of Science – Engineering
(Recommended Map for Students Starting in MTH201 Calculus I)

Name: _____ ID#: _____ Date: _____

This academic map is a semester-by-semester schedule of courses based upon the AS degree requirements as outlined in the academic catalog. In order for you to graduate in two years, specific milestones, courses and other requirements (e.g. prerequisites) must be met in a timely manner. To ensure that milestone courses are completed, it is important that you, when possible and appropriate, enroll in any needed developmental coursework during the first semester(s) of enrollment. Additionally, keep in mind this map does not substitute for academic advisement. If you have questions, see your advisor and refer to the MACC website for current information.

Taken	Course	Semester	Hours
		First Semester	
	EGN101	Introduction to Engineering	1
	LAL101	^Composition I	3
	MTH201	^Analytic Geometry & Calculus I	5
	PHY121	^General Chemistry I	5
			14
		Second Semester	
	HST105 <u>or</u> HST106 <u>or</u> PSC105	American History to 1865 <u>or</u> American History from 1865 <u>or</u> Introduction to American Government	3
	LAL102	^Composition II	3
	MTH202	^Analytic Geometry & Calculus II	5
	PHY201	^Engineering Physics I	5
			16
		Third Semester	
	ECN101 <u>or</u> ECN102	Macroeconomics <u>or</u> Microeconomics	3
		<u>Engineering Elective</u>	3
	MTH203	^Analytic Geometry & Calculus III	5
	PHY202	^Engineering Physics II	5
			16
		Fourth Semester	
		<u>Engineering Elective</u> (MTH250 Differential Equations – Recommended)	3
		<u>Free Elective</u> (General Education or Engineering)	3
		<u>Free Elective</u> (General Education or Engineering)	3
		<u>General Education Elective</u>	3
		<u>General Education Elective</u>	3
			15
		Minimum Required Hours for Degree	61

****Shaded courses must be completed in the sequence indicated. Failure to complete these courses in the appropriate sequence will result in extension of time to complete the AS degree.**

^Please refer to the college catalog and course descriptions for pre/co-requisite and placement information. You can only register for these courses if you have met the prerequisite, placed into the course and/or enroll in the co-requisite course(s).

Additional Graduation Requirement - Missouri law, included in Senate Bill 807, requires every college student pursuing an associate's or bachelor's degree at a public institution to pass the Missouri Higher Education Civics Achievement Examination with at least a 70 percent to graduate. The rule will apply to the incoming class of first-time college students in the fall of 2019 and all students thereafter.

General Education Elective Options for AS Degree

Please refer to the Elective Course Transfer Guide for requirements specific to individual transfer degree programs.

MACC Course	MU Equivalent	S&T Equivalent
Humanities/Fine Arts		
ART 101 Art Survey & Appreciation I	AR_H_A 1110 Ancient & Medieval Art	ART 1180 Art Appreciation
ART 102 Art Survey & Appreciation II	AR_H_A 1120 Renaissance Thru Modern A	
DRM 120 Theatre Appreciation	THEATR HUM Humanities Tran Cred	THEATRE 1190 Theatre via Video
LAL 120 Am Lit Survey to 1870	ENGLISH 2300 Studies in American Lit	ENGLISH 1221 Amer Lit: 1600 to 1865
LAL 121 Am Lit Survey 1870- Present		ENGLISH 1222 Amer Lit: 1865 to Pres
LAL 125 African-American Literature	ENGLISH 2400 Intro African Diaspora Lit	General Literature Elective
LAL 150 English Lit. Survey to 1750	ENGLISH 2200 Studies in British Lit	ENGLISH 1211 Brit Lit I: Begin/1800
LAL 151 English Lit. 1750-Present		ENGLISH 1212 Brit Lit II: 1800/Pres
LAL 251 Science Fiction	ENGLISH LIT Literature Transfer Credit	*HUMU 2510 Humanities- Upper Level
LAL 275 Classical Mythology	CL_HUM 1060 Classical Mythology	General Literature Elective
MUS 102 Music Appreciation	MUSIC_NM 1310 Western Music	MUSIC 1150 Music Understanding & Appreciation
MUS 105 Music of America	MUSIC_NM HUM Humanities Tran Cred	General Humanities Elective
MUS 205 World Music	MUSIC_NM 1313 Intro to World Music	General Humanities Elective
PHI 150 Intro to Philosophy	PHIL 1000 Gen Intro to Philosophy	PHILOS 1105 Intro to Philosophy
PHI 151 Intro to Logic	PHIL 1200 Logic & Reasoning	PHILOS 1115 Introduction to Logic
PHI 152 Intro to Ethics	PHIL 1100 Introduction to Ethics	General Humanities Elective
PHI 153 Bioethics	PHIL 1150 Introductory Bioethics	General Humanities Elective
PHI 251 Religions of World	*REL_ST 2100 Religions of the World	PHILOS 1175 Comparative Religion/Philosophy
Social/Behavioral Sciences		
ECN 101 Macroeconomics	ECONOM 1015 Principles of Macroeconomics	ECON 1200 Principles of Macroeconomics
ECN 102 Microeconomics	ECONOM 1014 Principles of Microeconomics	ECON 1100 Principles of Microeconomics
GEO 101 World Geography I	GEOG 1200 Regions & Nations World 2	HIST 2100 World Regional Geography
HIST 101 Western Civilization I	HIST 1500 Foundations of Western Civilization	HISTORY 1100 Early Western Civilization
HST 105 American History to 1865	HIST 1100 Survey American History to 1865	HISTORY 1300 American History to 1877
HST106 American History from 1865	HIST 1200 Survey American History Since 1865	HISTORY 1310 American History Since 1877
PSC 105 Introduction to American Government	POL_SC SCC_ST Pol Sci State Law Req	POL SCI 1200 American Government
PSY 101 General Psychology	PSYCH 1000 General Psychology	PSYCH 1101 General Psychology
SOC 101 Sociology	SOCIOL 1000 Intro to Sociology	General Social Science Elective
Communications		
SPK 101 Public Speaking	COMMUN 1200 Public Speaking	SPMS 1185 Principles of Speech

Engineering Elective Options for AS Degree

Please refer to the Elective Course Transfer Guide for requirements specific to individual transfer degree programs.

MACC Course	MU Equivalent	S&T Equivalent
AMD 112 Computer Aided Design	ENGINR 11000 Engr Graphics Fundmn	GNCR 1XXX General Credit
ITC 120 Programming I	INFOTC 1040A Intro Prob Solve & Prog	CS 1971,1981 Intro to Program Method & Lab
BIO 155 General Biology for Majors I	BIO_SC 1500A Intro BIOL Systems w/Lab	BIO SCI 1213/1219 Principles of Biology w/Lab
BIO 160 General Biology for Majors II	BIO_SC 1500B Intro BIOL Systems w/Lab	BIO SCI 1223/1220 Biodiversity w/Lab
BIO220 General Genetics	BIO_SC 2200 General Genetics	GNCR 1XXX General Credit
ITC 220 Programming II	INFOTC 1040A Intro Prob Solve & Prog	CS 1570,1580 Intro to Program & Lab
EGN 201 Statics	ENGINR 1200 Stats & Elem Strn Matr	CIV ENG 2200 Statics
IND 105 Fluid Power Principles	MISC_ELEC (Miscellaneous Elective)	GNCR 1XXX General Credit
MTH 250 Differential Equations	MATH 4100 Differential Equations	MATH 3329 Elem Diff Eqn & Matrix Algebra
PHY 122 General Chemistry II	CHEM 1330 College Chemistry 2	CHEM 1320, 1510 Gen Chem II & Qual Anl
PHY 163 Geology	GEOL 1100 Principles of Geology w/Lab	GEOLOGY 1111 Intro to Physical Geology