



ACADEMIC MAP: PRE-ENGINEERING

This academic map is an example of a 4-semester guide based on university transfer options according to the MATT Tool. Classes may be taken out of sequence unless a prerequisite is noted. See your Faculty Advisor for details.

FRESHMAN YEAR

First Semester	Sem Hrs.	Second Semester	Sem Hrs.
ENG 1113 English Composition I	3	ENG 1123 English Composition II	3
CHE 1213 General Chemistry I	3	CHE 1223 General Chemistry II	3
CHE 1211 General Chemistry I Lab	1	CHE 1221 General Chemistry II Lab	1
CSC 1613 Computer Programming I	3	PHY 2514 Engineering Physics I	4
MAT1613 Calculus I	3	MAT 1623 Calculus II	3
EGR 1113 Intro to Engineering	3	ART 1113 or MUS 1113 or SPT 2233	3
LLS 1311 Orientation	<u>1</u>		17
	17		

SOPHOMORE YEAR

First Semester	Sem Hrs.	Second Semester	Sem Hrs.
MAT2613 Calculus III	3	MAT 2623 Calculus IV	3
MAT 2113 Introduction to Linear Algebra	3	MAT 2913 Differential Equations	3
*Social Science or EGR	3	*Social Science or EGR	3
EGR 2423 Engineering Mechanics I	3	EGR 2433 Engineering Mechanics II	3
PHY 2524 Engineering Physics II	3	*Social Science or EGR	3
HIS 1163 World Civilization I	<u>3</u>	*Social Science or EGR	<u>3</u>
	18		18

TOTAL HOURS: 69[^]

[^]Co-Lin requires 60 hours to graduate with an AA or AS (see #2 and #3 in the notes below). The mathematics core requirement is College Algebra (MAT 1313) or higher. This degree plan assumes the student has completed MAT 1313 or higher or has a Math ACT score of 26 or higher.

NOTES:

1. Please consult with the curriculum from the catalog of the university to which you plan to transfer for specific courses that can be taken at Co-Lin.
2. Acceptance of community college work is limited to one-half of the total degree hour requirement for graduation in a given curriculum.
3. It is the student's responsibility to review the Mississippi Statewide Articulation Agreement called the [MATT Transfer Tool](#) for courses accepted by each Mississippi public university.
4. Students need to meet requirements for AA or AS to graduate from Co-Lin. Co-Lin students are not required to have 6 hours of humanities and 6 hours of social sciences for AS.
 - a. For AA Option, select PSY1513 Psychology, ECO2113 Macroeconomics, SOC2113 Sociology and/or HIS1173 World Civilization II.
 - b. For AS Option, select EGR1122 Engineering Design or EGR2453 Mechanics of Materials.

UPDATED: 5/18/2023



ACADEMIC MAP: PRE-ENGINEERING

This academic map is an example of a 4-semester guide based on university transfer options according to the MATT Tool. Classes may be taken out of sequence unless a prerequisite is noted. See your Faculty Advisor for details.

PAGE 2

*BE also need CHE2424

*CE do not need PHY2524, MAT2113, or CSC1613

*AE do not need CHE1223 or CSC1613.

*CHE do not need EGR2433 but need CHE2424 and CHE2434

*CPE do not need CHE1223, EGR2423, or EGR2433, but need CSC2623, CSC2134, and CSC2144

*EE do not need CHE1223 or EGR2433, but need CSC2623, CSC2134 and CSC2144

*IE do not need CSC1613, CHE1221LAB or EGR2433 also can take MAT2913

*PE do not need CSC1613, EGR2423 or MAT2113

*SE do not need CHE1223, MAT2113, EGR2423, or EGR2433 but need CSC2623, CSC2134, and CSC2144

BE = Biological Engineering

CE = Civil Engineering

AE = Aerospace Engineering

CHE = Chemical Engineering

CPE = Computer Engineering

EE = Electrical Engineering

IE = Industrial Engineering

ME = Mechanical Engineering

PE = Petroleum Engineering

SE = Software Engineering

For transfer students in Chemical Engineering at MSU

1. Linear Algebra is not required for CHE, but can count as a technical elective
2. Computer programming (python or C++) **will** count as CHE-2213, CHE Analysis, a required freshman CHE course
3. Our Introduction to Engineering will count towards Introduction to Chemical and Petroleum Engineering, a 1 hour freshman course.

UPDATED: 5/18/2023