ACADEMIC MAP

Pre-Engineering

The academic map is a recommended 4-semester guide.
Some classes may be taken out of sequence. 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 General Physics I-A	4
MAT 1613 Calculus I*	3	MAT 1623 Calculus II	3
HIS 1163 World Civilization I	3	ART 1113, MUS 1113, or SPT 2233	3
LLS 1311 Orientation	1		
	17		17
SOPHOMORE YEAR			
First Semester	**Sem Hrs.**	**Second Semester**	**Sem Hrs.**
MAT 2613 Calculus III	3	MAT 2623 Calculus IV	3
MAT 2113 Intro to Linear Algebra	3	MAT 2913 Differential Equations	3
EGR 2413 Engineering Mechanics I	3	EGR 2433 Engineering Mechanics II	3
Social Science or EGR	3	Electives**	9
PHY 2524 General Physics II-A	4		
	16		18

TOTAL HOURS: 68 *In general, a Pell grant will only cover up to 60 hours of a degree plan.*

*This degree plan assumes the student has completed MAT 1313 and MAT 1323 or MAT 1343 or has a Mathematics ACT score of 26 or higher prior to the freshman year. If the student does not have one of these complete, s/he needs to begin with MAT 1313 before the Calculus series.

**The student may choose between the A.A. or A.S. degree. The degree plan above is written for a student pursuing an A.S. For the A.A. degree, students need to choose another humanities elective, another social science, and SPT 1113. Suggestions are PSY 1513, ECO 2113, SOC 2113, and/or HIS 1173.

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 requirements for graduation in a given curriculum.
3. It is the student's responsibility to review the Mississippi Statewide Articulation Agreement for courses accepted by each Mississippi public university.

SPECIALTY-SPECIFIC NOTES

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

- BE also needs CHE 2423/2421
- CE does not need PHY 2524, MAT 2113, or CSC 1613
- AE does not need CHE 1223/1221 or CSC 1613
- CHE does not need EGR 2433, but needs CHE 2423/2421 and CHE 2433/2431
    - For students transferring to MSU:
        - MAT 2113 is not required but can count as a technical elective.
        - Computer programming (Python or C++) will count as CHE 2213 (CHE Analysis), a required freshman CHE course.
- CPE does not need CHE 1223/1221, EGR 2423, or EGR 2433, but needs CSC 2623, CSC 2134, and CSC 2144
- EE does not need CHE 1223/1221 or EGR 2433, but needs CSC 2623, CSC 2134, and CSC 2144
- IE does not need CSC 1613, CHE 1221 (lab), or EGR 2433, but can take MAT2913
- PE does not need CSC 1613, EGR 2433, or MAT 2113
- SE does not need CHE 1223/1221, MAT 2113, EGR 2413, or EGR 2433, but needs CSC 2623, CSC 2134, and CSC2144