

CHEMICAL ENGINEERING Practice Concentration: Co-op Begins Sophomore Spring (4 semesters)

Premises: The following coursework from the “Mississippi Community College Transfer Advising Guide for Students Transferring to Mississippi State University College of Engineering” (or its equivalent) has been completed (in general with a C or better).

Description	Mississippi Community College Course Number	MSU Course Number
English Composition	ENG 1113 and 1123	EN 1103 and 1113
Fine Arts	ART 1113 or MUS 1113	3 s.h. approved Fine Arts
Humanities	History, Foreign Language, Literature, Philosophy, Religion	6 s.h. approved Humanities
Social Sciences	ECO/GEO/PSC/ PSY/SOC	6 s.h. approved Social Sciences
Chemistry I with Lab	CHE 1214	CH 1211 and 1213
Chemistry II with Lab	CHE 1224	CH 1221 and 1223
Organic Chemistry with Labs	CHE 2424 and 2434	CH 4511 and 4513 CH 4523 CH 4521 subs for CHE 1101
Physics (Calculus-based)	(PHY 2514 and 2524) or (PHY 2313 and 2323)	PH 2213 and PH 2223
Calculus	MAT 1613, 1623, 2613, and 2623	MA 1713, 1723, 2733, and 2743
Differential Equations I	MAT 2913	MA 3253
Structured Programming (C, Visual Basic, etc.)	CSC 1213 or 2323	CHE 2213
Engineering Mechanics I	EGR 2413	EM 2413
	TOTAL transfer credit applied	64 s.h.
	Maximum allowable transfer credit	64 s.h.

The three-semester co-op rotation starts the spring of the first year at MSU. Student is on track in the ChE curriculum. The normal 4-semester plan of study is pursued with 1 summer course to lighten the senior-year course load.

1 st year at MSU					
Fall – 16 s.h.		Spring		Summer – 3 s.h.	
CHE 2114	Mass & Energy Balances	1 st co-op semester		CHE 3413	Eng Materials
CHE 3113	Chem En Thermo I				
CHE 3203	Fluid Flow Op				
IE 3913	Engr Economy I				
	CH/CHE/Technical Elective				
2 nd year at MSU					
Fall		Spring – 15 s.h.		Summer	
2 nd co-op semester		CHE 3123	Chem En Thermo II	3 rd co-op semester	
		CHE 3213	Heat Transfer Op		
		CHE 3222	Chem Eng Lab I		
		CHE 3223	Separation Processes		
		CHE 3331	Prof Develop Seminar		
		GE 3513	Technical Writing		
3 rd year at MSU					
Fall – 15 s.h.		Spring – 15 s.h.			
CHE 3232	Chem Eng Lab II	CHE 4223	Pro Instr & Con		
CHE 4113	Chem Reactor Design	CHE 4233	Chemical Plant Design		
CHE 4134	Process Design	CHE 4633	Chemical Pro Safety		
	CH/CHE/Technical Elective		CHE or Chemistry Elective		
	CHE or Chemistry Elective		CHE or Chemistry Elective		

Deviations from the list of completed courses may require additional semesters to fulfill graduation requirements. Note that there are many permutations of this schedule, especially in the placement of elective coursework. In addition, fall and spring semester loads can be further lightened by taking additional summer coursework. Please work with your assigned faculty advisor to develop a custom plan of study based on your graduation and career goals.