

5+ Plan: BS/MS Fast Track - ChE Masters Curriculum⁵ (ChE)
 For students beginning Fall 2005

<i>FALL</i>			<i>SPRING</i>		
<u>1st Year</u>					
ENGR 1210	Intro to Eng.	1	ENGR 1120	Programing ¹	2
MATH 1910	Calculus I	4	MATH 1920	Calculus 2	4
CHEM 1110	Gen Chem I	4	CHEM 1120	Gen Chem 2	4
ENGL 1010	Writing I	3	ENGL 1020	Writing 2	3
Hum/Fine Arts	GE Elective	3	Hum/Fine Arts	GE Elective	3
CHE 1010	Intro to ChE	1			
Total Credit Hours		16			16

<u>2nd Year</u>					
MATH 2110	Calc 3	4	MATH 2120	Diff Eqs	3
CHEM 3010	Org. Chem 1	4	CHEM 3020	Org. Chem. 2	4
PHYS 2110	Physics I	3	PHYS 2120	Physics 2	3
PHYS 2111	Physics 1 Lab	1	PHYS 2121	Physics 2 Lab	1
CHE 2010	ChE Analysis	3	CHE 2210	ChE Lab I	1
SPCH 2410 or PC 2500	Speech	3	ENGL 2130, 2230 or 2330	Hum/Fine Arts (Lit)	3
Total Credit Hours		18			15

<u>3rd Year²</u>					
CHE 3010	Thermo I	3	CHE 3020	Thermo II	3
CHE 3110	Transfer I	4	CHE 3120	Transfer II	3
CHEM 3510	Physical Chem 1	4	CHE 3220	ChE Lab II	1
Soc/Beh. Sc.	GE Elective	3	CHEM 3520	Physical Chem 2	4
XXX xxxx	Tech. Elective ³	3	Soc/Beh. Sc.	GE Elective	3
			CEE 2100 or ECE 3810 or BIOL 3200		3
Total Credit Hours		17			17

<i>FALL</i>			<i>SPRING</i>		
<u>4th Year</u>					
CHE 4130	Transfer III	3	CHE 4240 or 4241	ChE Lab IVa or IVb	1
CHE 4210	Kinetics	4	CHE 4420	Design II	3
CHE 4230	ChE Lab III	2	CHE 4540	Process Dyn. & Contr.	3
CHE 4410	Design I	3	CHE 4xxx	ChE Tech. Elec. (see note 1)	3
CHE 4730	ChE Operations	3	CHE 4xxx	ChE Tech. Elec. (see note 1)	3
CHE 4911 ⁶	ChE Seminar	1	XXX xxxx	MS Elective ⁷	3
CHE 5510	Appl Math in ChE	3	CHE 4810	Dev. Areas in ChE	1
Total Credit Hours		19			17

<u>Fifth Year^{7,8}</u>					
SUMMER:					
CHE 6990	Research & Thesis	3			
Total Credit Hours		3			

<i>FALL</i>			<i>SPRING</i>		
CHE 6010	Adv. Thermo	3	CHE 6110	Transfer	3
CHE 6210	Adv. Kinetics	3	XXX xxxx	MS Elective ⁷	3
XXX xxxx	MS Elective ⁷	3	XXX xxxx	MS Elective ⁷	3
Total Credit Hours		9			9

SUMMER:					
CHE 6990	Research & Thesis	3			
Total Credit Hours		3			

NOTES:

1. ENGR 1120 can be any programming language offering.
2. Students must apply to the ChE Fast-Track MS program by the end of their second junior term.
3. Three hours of Technical Elective can be from any of the following courses
 - a. Any College of Engineering course at the 3000 or 4000 level.
 - b. Any BIOL/CHEM/MATH/PHYS at the 3000 or 4000 level
 - c. CEE 2100
 - d. Any course with the prior approval of the ChE Undergraduate Program Coordinator
 - e. Note that CEE 2100, BIOL 3200 and ECE 3810 can not count both as a Technical Elective and as part of the CEE 2100/ECE 3810/BIOL 3200 option.
4. Three hours of ChE Technical Elective must come from one of the following courses
 - a. ChE 4950 – MEMS
 - b. ChE 4660 – Biochemical Engineering
 - c. ChE 4990 – Introduction to Research
5. Students must apply and take the GRE during their second senior term (one semester prior to their anticipated graduation).
6. Fast-Track ChE MS students will register for ChE 4911 in which graduate research topics will be discussed.
7. At least seventy percent of the credit to be counted toward a master's degree must be at the 6000 level or above. Courses listed as 4000 (5000) may be taken only at the 5000 level for graduate credit. Courses taken at the 4000 level may not later be taken at the 5000 level without special permission from the departmental chairperson, dean of the college, and the Associate Vice-President of Research and Graduate Studies.
8. Students enrolled in the fast-track BS/MS program must complete all requirements for both the BS and MS degrees as outlined in the undergraduate and graduate catalogues respectively.