

CHEMICAL ENGINEERING CURRICULUM

Research Development Concentration (Revised August 4, 2016)

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
1A ChE 1011 Freshman Seminar	2A ChE 2213 CHE Analysis Pre-req: C or better in 1E; Credit or registration in 1C	3A ChE 2114 Mass & Ener Bal Pre-req: C or better in 2E Co-req: registration in 2C	4A ChE 3113 Thermo I Pre: C or better in 2E & 2F Co-req: 3A, 3C	5A ChE 3123 Thermo II Pre: C or better in 4C, 3A & 4A	6A ChE 3213 Heat Trans Ops Pre: C or better in 4C, 3B or EM 3313 Co-req: 4A & 4D	7A ChE 3232 ChE Lab II Pre-req: C or better in 3B or EM 3313, 6A & 6B	8A ChE 4223 Process Controls Pre: 7B; C or better in 6B
		3B ChE 3203 Fluid Flow Ops Pre-req: C or better in 2F Co-Req: 3A & 2C		5B ChE 3413 Engineering Materials Pre: C or better in 2E & 2F	6B ChE 3223 Separation Processes Pre: C or better in 3B Credit or regis. in 5A & 6A	7B ChE 4113 ChE Reactor Design Pre: C or better in 4D, 5A	8B ChE 4233 ChE Plant Design Pre: 7B & 7C
1C MA 1713 Calculus I Pre: ACT Math subscore of 26 or C in MA 1323 or 1453	2C MA 1723 Calculus II Pre: C or better in MA 1713	3C MA 2733 Calculus III Pre: C or better in MA 1723	4C MA 2743 Calculus IV Pre: C or Better in MA 2733	5C MA 3353 Differential Equations II Pre: 4C	6C ChE 3331 Jr. Seminar Pre: Jr. standing in ChE curriculum	7C ChE 4134 ChE Process Design Pre: 4E; C or better in 5A, 6A & 6B	8C ChE 4313 Transport Phenomena Pre: C or better in 6A, 4D & 3B or EM 3313
1D CH 1211 Investigations In Chemistry	2D CH 1221 Investigations In Chemistry Pre: 1C and credit or enrolled CH 1223	3D MA 3113 Linear Algebra Pre: 2C	4D MA 3253 Differential Equations Pre: 4C OR Co: 4C	5D CH 4511 Organic Chemistry Lab I Pre: CH 1223/1221; Co: CH 4513	6D ChE 3222 ChE Lab 1 Co: C or better in 3B or EM 3313 Credit or registration in 6A	7D Chemistry Elective	8D ChE 4633 Process Safety Pre: C or better in 3A, 3B or EM 3313, and 2C
1E CH 1213 Fundamentals of Chemistry Pre: Math ACT=22 or C in MA 1313	2E CH 1223 Fundamentals of Chemistry Pre: Credit in CH 1213		4E IE 3913 Engr. Econ. Pre: 1B	5E CH 4513 Organic Chemistry I Pre: CH 1223	6E CH 4523 Organic Chemistry II Pre: CH 4513	7E CH 4413 or 4423 Thermo & Kin. or Quantum Mech. Pre: CH 1223, PH 2213, and MA 1723	8E Statistics Elective must be a separate course than used for PH 2223 credit
1F Social Science Elective	2F PH 2213 Physics I Pre: MA 1713 Co: MA 1723				6F GE 3513 Tech Writing Pre: 1G, 2G & Junior Standing		8F PH 2223 Physics II or substitute Pre: 2E, 2B
1G EN 1103 English Composition I Pre: ACT English subscore of 19 or EN 1003	2G EN 1113 English Composition II Pre: 1G, EN 1163, or EN 1183			5G Humanities Elective			PH 2223 subs: IE 4613, IE 462 4523, MA 4533, MA 4543, MA 4
1H Humanities Elective		3H Social Science Elective	4H Fine Arts Elective				

A grade of "C" or better is required in all chemical engineering courses and math courses excluding CHE 4113, 4134, 4223, & 4233