Chemical Engineering Graduate Program for BS Chemists[a]

I. Complete Prerequisites for Graduate Work and Necessary ChE Professional Skills

	Semester Hours
CHEN 2100/2101 Principles of Chemical Engineering and Lab	3+1 = 4
ENGR 2010 Engineering Thermodynamics	3
CHEN 2610 Transport I – Fluids and Fluid/Solids	3
CHEN 3370 Phase & Reaction Equilibria	3
CHEN 3620 Transport II – Heat and Mass Transport	3
CHEN 3700 Chemical Reaction Engineering	3
CHEN 3650 Analysis	3
CHEN 3660 ChE Separations	3
CHEN 3820 ChE Lab I[b,c]	2
CHEN 4450 Process Economics[b]	2
Total:	29 hours

II. Graduate Work (Select one of the following)

PhD Chemical Engineering	MS Chemical Engineering	MChE Chemical Engineering
w/Research Dissertation[d]	w/Research Thesis[d]	NonThesis Masters[d]
60 hours	30 hours	32 hours

Notes:

a. BS degree should be from a program accredited by the American Chemical Society. The accreditation assumes that the students have taken: General Physics, Calculus and Differential Equations, General, Organic and Physical Chemistry, Computer Science

b. Can be taken concurrent with core graduate courses if necessary.

c. Not needed for PhD Program

d. See detailed requirements for the selected graduate program. Graduate-level elective work from previous studies, CHEN 6000 level Design and CHEN 6000 level Control courses can be substituted as part of the graduate electives.