

MASTER OF SCIENCE IN CHEMICAL ENGINEERING WITH SPECIALIZATION IN ENERGY/ENVIRONMENT/ECONOMICS (E3)

Students pursuing the M.S. in Chemical Engineering with E3 specialization are required to take CHE 543 and select at least one course from Group A and one course from Group B, and register for 6-8 credit hours of M.S. thesis preparation (CHE 591) in an interdisciplinary E3 area. In addition, the students are required to take all required core courses for the M.S. in Chemical Engineering degree.

Students may apply up to 12 credit hours of 400-level courses to the M.S. degree requirements with their adviser's approval. Students are also encouraged to register or attend the interdisciplinary graduate seminar (CHE 593) or general seminars offered in energy and/or sustainability areas by the Wanger Institute for Sustainable Energy Research (WISER) .

Curriculum

Code	Title	Credit Hours
Core Courses		(12)
CHE 525	Chemical Reaction Engineering ¹	3
CHE 535	Applications of Mathematics to Chemical Engineering ¹	3
CHE 551	Advanced Transport Phenomena ¹	3
CHE 553	Advanced Thermodynamics ¹	3
E3 Courses		(9)
CHE 543	Energy, Environment, and Economics	3
Select one course from Group A		3
Select one course from Group B		3
Thesis Research		(6-8)
CHE 591	Research and Thesis for M.S. Degree	6-8
Electives		(2-4)
Select 2 to 4 credit hours		2-4
Recommended		(1)
CHE 593	Seminar in Chemical Engineering (or general seminars offered in energy and/or sustainability by WISER)	1

Minimum degree credits required: 32

¹ A minimum grade point average of 3.0/4.0 is required for core courses.