

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

This program has the same requirements as the M.S. degree program, except that in place of 6-8 credit hours of M.S. thesis research, students are required to register for 2-5 credit hours of special projects research (CHE 594), plus additional E3 courses with the approval of their adviser. 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
<b>Core Courses</b>		(12)
CHE 525	Chemical Reaction Engineering	3
CHE 535	Applications of Mathematics to Chemical Engineering	3
CHE 551	Advanced Transport Phenomena	3
CHE 553	Advanced Thermodynamics	3
<b>Special Projects Research</b>		(2-5)
CHE 594	Special Projects	2-5
<b>E3 Courses</b>		(9)
CHE 543	Energy, Environment, and Economics	3
Select a minimum of one course from Group A		3
Select a minimum of one course from Group B		3
<b>Electives</b>		(5-8)
Select 5 to 8 credit hours		5-8
<b>Recommended</b>		(1)
CHE 593	Seminar in Chemical Engineering (or general seminars offered in energy and/or sustainability by WISER)	1

**Minimum degree credits required: 32**