

# MINOR IN ENERGY/ENVIRONMENT/ECONOMICS

## Required Courses

Code	Title	Credit Hours
CHE 543	Energy, Environment, and Economics	3
Select six credit hours from the following:		6
CHE 465	Electrochemical Energy Conversion	3
CHE 467	Fuel Cell System Design	3
CHE 489	Fluidization	3
CHE 491	Undergraduate Research	1-20
CHE 541	Renewable Energy Technologies	3
CHE 542	Fluidization and Gas-Solids Flow Systems	3
CHE 565	Fundamentals of Electrochemistry	3
CHE 582	Interfacial and Colloidal Phenomena with Applications	3
ECE 319	Fundamentals of Power Engineering	4
ECE 411	Power Electronics	4
ECE 419	Power Systems Analysis with Laboratory	4
ECE 420	Analytical Methods for Power System Economics and Cybersecurity	3
ECE 438	Control Systems	3
MMAE 425	Direct Energy Conversion	3
MMAE 426	Nuclear, Fossil-Fuel, and Sustainable Energy Systems	3
or MMAE 522	Nuclear, Fossil-Fuel, and Sustainable Energy Systems	
MMAE 524	Fundamentals of Combustion	3
MMAE 525	Fundamentals of Heat Transfer	3
Select six credit hours from the following:		6
ECE 491	Undergraduate Research	1-3
ECE 497	Special Problems	1-4
ECON 423	Economics of Capital Investments	3
ENVE 404	Water and Wastewater Engineering	3
ENVE 463	Introduction to Air Pollution Control	3
ENVE 485	Industrial Ecology	3
MMAE 491	Undergraduate Research	1-6
MMAE 494	Undergraduate Design Project	1-3
MMAE 497	Undergraduate Special Topics	1-6
PS 338	Energy Policy	3
<b>Total Credit Hours</b>		<b>15</b>

Appropriate substitutions may be made with the approval of the minor adviser.