

MASTER OF ENGINEERING IN MECHANICAL AND AEROSPACE ENGINEERING WITH SPECIALIZATION IN ENERGY/ENVIRONMENT/ECONOMICS (E3)

Curriculum

Code	Title	Credit Hours
Engineering Analysis Courses		(6)
MMAE 501	Engineering Analysis I	3
MMAE 502	Engineering Analysis II	3
Core Courses		(9)
CHE 543	Energy, Environment, and Economics	3
Select a minimum of one course from the following:		3
CHE 503	Thermodynamics	3
CHE 553	Advanced Thermodynamics	3
MMAE 520	Advanced Thermodynamics	3
Select a minimum of one course from the following:		3
CHE 541	Renewable Energy Technologies	3
MMAE 522	Nuclear, Fossil-Fuel, and Sustainable Energy Systems	3
MMAE 523	Fundamentals of Power Generation	3
MMAE 524	Fundamentals of Combustion	3
Non-Core Courses		(9)
Select a minimum of two courses from the following:		6
MMAE 524	Fundamentals of Combustion	3
MMAE 525	Fundamentals of Heat Transfer	3
MMAE 526	Heat Transfer: Conduction	3
MMAE 527	Heat Transfer: Convection and Radiation	3
Select a minimum of one course from the following:		3
CHE 541	Renewable Energy Technologies	3
CHE/MMAE 560	Statistical Quality and Process Control	3
ENVE 501	Environmental Chemistry	3
ENVE 506	Chemodynamics	3
ENVE 542	Physiochemical Processes in Environmental Engineering	3
ENVE 551	Industrial Waste Treatment	3
ENVE 561	Design of Environmental Engineering Processes	3
ENVE 570	Air Pollution Meteorology	3
ENVE 577	Design of Air Pollution Control Devices	3
ENVE 578	Physical and Chemical Processes for Industrial Gas Cleaning	3
ENVE 580	Hazardous Waste Engineering	3
Electives		(6)
Select 6 credit hours		6
Total Credit Hours		30