

MSME CONCENTRATION IN ENERGY CONVERSION AND EFFICIENCY

The curriculum is designed to provide mechanical engineering skills in energy applications, renewable energy, and the technologies that improve energy conversion and efficiency. The quantitative requirement for the degree is 30 credit hours completed with a GPA of 2.75 or better. The course program must conform to the following distribution:

Area of specialization	15 credits
Electives (graduate level engineering or math)	9 credits
Energy Analysis & Design Project or Thesis	6 credits

Courses from which one must choose 15 units of specialization (any 5 courses)

ME 541/542*	Thermal Systems Analysis and Design I & II
MASE 5420/5421*	HVAC Analysis and Design I & II
ME 580	Building Environmental Systems Parameters
MASE 5422	Solar Energy Thermal Processes
MASE 5423	Solar Energy Thermal Processes II
MASE 5404	Combustion Phenomenon
MASE 5101	Fluid Power Systems
MASE 5401	General Thermodynamics
MASE 5402	Radiation Heat Transfer
MASE 5403	Conduction and Convection Heat Transfer
MASE 5410	Fluid Dynamics I
MASE 5412	Computational Fluid Dynamics