

# THERMAL-FLUIDS

## Requirements

To complete the requirements of the Minor in Thermal-Fluids, a student must fulfill the following three expectations:

Code	Title	Hours
(1) Completion of a set of 2 courses covering basic fluid mechanics and basic thermodynamics. These are commonly required for most engineering majors. Acceptable sets include		8
ES 201 & ES 312	Conservation & Accounting Principles and Fluid Systems	
CE 205 & EM 301	Thermodynamics and Fluid Mechanics	
CHE 201 & CHE 301	Conservation Principles and Balances and Fluid Mechanics	
(2) Select one of the following foundational prerequisites:		4
ME 201	Applications of Thermodynamics	
CHE 303	Chemical Engineering Thermodynamics	
ME 302	Heat Transfer	
CHE 320	Fundamentals of Heat & Mass Transfer	
(3) Select three of the thermal-fluids electives listed below:		12
Thermal-Fluid Systems:		
ME 408	Renewable Energy	
ME 410	Internal Combustion Engines	
ME 411	Propulsion Systems	
ME 426	Turbomachinery	
Thermal-Fluid Sciences:		
ME 401	Foundations of Fluid Mechanics	
ME 405	Theoretical Aerodynamics	
ME 427	Introduction to Computational Fluid Dynamics	
ME 450	Combustion	
ME 510	Gas Dynamics	
<b>Total Hours</b>		<b>24</b>

Successful completion of a minor is indicated on the student's transcript. A student interested in pursuing the Minor in Thermal-Fluids should consult with the head of the Department of Mechanical Engineering.

ME Majors do **not** qualify for the Minor in Thermal-Fluids, but may pursue ME areas of concentration.