

# ENGR3300 - Advanced Engineering Mathematics

[ENGR 3300](#) Advanced Engineering Mathematics (3 semester credit hours) Survey of advanced mathematics topics needed in the study of engineering. Topics include use of complex numbers, properties of complex-valued functions, scalar and vector fields, introduction to partial differential equations, and Fourier series. Examples are provided from electromagnetics, fluid mechanics, thermodynamics, and engineered systems. This course includes a required laboratory.

Prerequisites: ([MATH 2415](#) or [MATH 2419](#) or equivalent) and [ENGR 2300](#). Prerequisite or

Corequisite: [MATH 2420](#). (3-1) S