

# EGR 8000: Engineering Mathematics

Applied mathematics course tailored to the needs of engineering graduate students. Topics: complex variable theory, linear spaces and linear operators, series solution of differential equations, Sturm-Liouville problem, eigen-function expansion and special functions, matrix theory, non linear differential equations, multi-dimensional Fourier analysis, partial differential equations and variational calculus. Various examples from engineering and physics will be incorporated as appropriate.

**Credits:** 3

**Program:** [Engineering](#)