

ECE 8001: Engineering Math I

Applied mathematics course tailored to the needs of EE graduate students. Topics: i) Complex variable theory, ii) Sturm-Liouville problem, eigen-function expansion and special functions, iii) Matrix theory, eigen value and diagonalization, iv) Fourier analysis, multi-dimensional Fourier series and transforms, and v) Partial differential equations. Various examples from engineering and physics will be incorporated as appropriate.

Credits: 3.0