

# ECE 8224: Reliability Theory & Practice

Concepts and techniques of reliability evaluation at both the component and systems levels. The material will be useful to engineers in any discipline who are involved in system design or system performance/safety evaluation. Topics: reliability function, hazard rates, MTTF; component reliability, reliability network modeling; decomposition, cut set/tie set, event space, and fault-free approaches to reliability evaluation; systems with repair, Markov process models, availability, frequency and duration concepts, MTBF; approximations to systems reliability; introduction to software reliability. Prerequisites: Background in probability theory or permission of instructor.

**Credits:** 3.0