MECH6334 - Smart Materials and Structures

**MECH 6334** Smart Materials and Structures (3 semester credit hours) Introduction to smart materials. Fundamental properties of smart materials including piezoelectric materials, shape memory alloys or polymers, conducting polymers, dielectric elastomers, and ionic polymer metal composites. Constitutive modeling of smart materials. Characterization techniques. Applications as sensors, actuators and in energy harvesting. Prerequisite: **MECH 6306**, (3-0) T