MECH 5306 - Mechanical Measurement Techniques

MECH 5306 Mechanical Measurement Techniques (3 semester credit hours) This course presents an introduction to measurement theory and techniques. Coverage is focused on the types of measurements commonly encountered in mechanical engineering such as flow rate, pressure, temperature, strain, force, and displacement. The selection, use, and operating principles of instrumentation for each of the measurement categories are discussed. This course also emphasizes fundamental measurement principles such as uncertainty analysis, design and planning of experiments, data acquisition, data analysis, signal conditioning, and instrument calibration. Prerequisites: MECH 3320 and MECH 3351 and MECH 4310. (3-0) R