**Course Topics**

**EEE 573: Electric Power Quality**

**Prerequisites:** Graduate Engineering student

**Catalog Course Description:** Sinusoidal waveshape maintenance; study of momentary events, power system harmonics, instrumentation, filters, power conditioners, and other power quality enhancement methods.

**Course Topics:**

Introduction, Fourier series, harmonics, power quality indices

Power quality indices, standards

Power acceptability curves, power factor

Power quality measurements

Modeling

Sources of power quality problems

Transform analysis methods

State space analysis methods

Harmonic propagation analysis

State estimation applications

Aperiodic power quality issues, basic impulse level (BIL) flicker, transformer derating