

# ETRO 105 : Circuit Analysis I

**Credits:** 4

**Class Hours:** 3 lecture and 3 lab

**Prerequisites:** Qualified for MATH 103.

**Description:** This course covers fundamental topics including resistance, and networks, with DC voltage sources and circuit analysis. It also demonstrates Ohm's law, Kirchoff's laws, Thevenin's theorem, and maximum power theorems. Students will develop step-by-step problem solving methods and hands-on laboratory applications and utilize electronics measurement instrumentation and software for data analysis.

**Semester Offered:** Fall

**Course Student Learning Outcomes (CSLOs):**

1. Demonstrate effective use of multimeters, power supplies, circuit software, and hand tools used in electronics.
2. Demonstrate via calculations and practical hardware the theoretical and measured performance of DC circuits.
3. Function effectively on teams in an electronics lab environment, interacting with all levels of personnel.