EE COURSE STUDENT LEARNING OUTCOMES

EE 220 - Circuits I

Students will be able to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics (ABET SLO #1).

Students will be able to analyze and solve solve electric circuits using mesh and nodal analysis, Kirchoff's laws, and circuit theorem to derive equivalent circuits and simplify resistor networks.

Students will be able to formulate and solve circuit equations for operational amplifiers, as well as, differential and phasor equation for first order and R-L-C circuits, to determine key circuit variables.

EE 220L - Circuits I Laboratory

Students will be able to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics (ABET SLO #1).

Students will be able to design, wire, and troubleshoot electronic circuits (aligned with ABET outcome #2).

Students will be able to analyze and solve electric circuits in a lab context using mesh and nodal analysis, Kirchhoff's laws, and circuit theorem to derive equivalent circuits and simplify resistor networks (aligned with ABET #6).