ACTIVE CIRCUIT ANALYSIS AND DESIGN

EET 214 Active Circuit Analysis and Design 4.0 UNITS

Continuation of EET 212, Active Electronics Devices. Bipolar junction transistor (BJT) small signal multistage amplifiers, decibels, and power amplifiers are studied. Junction field effect and metal-oxide-silicon field effect transistor biasing, and small-signal operations are covered. Consideration will be given to the frequency response characteristics of BJT and JFET circuits. The experiments study the performance of small-signal amplifiers, connected in the common-emitter mode, the emitter-follower mode, and the common-based mode, followed by an analysis of cascaded RC coupled amplifiers. The analysis and design of biasing, and FET small-signal amplifiers. The final experiment is a detailed analysis of the frequency response of a transistor amplifier.