EEMF 6323 - Circuit Modeling of Solid-State Devices

EEMF 6323 Circuit Modeling of Solid-State Devices (3 semester credit hours) Provide physical insight into the operation of MOSFETs and BJTs, with particular emphasis on new physical effects in advanced devices. Compact (SPICE-level) transistor models will be derived from basic semiconductor physics; common simplifications made in the derivations of model equations will be detailed to provide an appreciation for the limits of model capabilities. Prerequisites: EEMF 6320 and EEMF 6321. (3-0) R (2016-02-06 00:07:04)