Course Topics

EEE 598: Technology Computer Aided Design

Prerequisites: EEE 436 (or equivalent), 433 (recommended) and basic knowledge of solid state physics, semiconductor devices, and circuits

Course Description: Introduction to numerical modeling of semiconductor devices (diodes, capacitors, transistors) with TCAD device simulation software. Mixed mode simulation, design optimization, reliability and extreme environmental effects modeling

Course Topics:

Semiconductor Device Physics
Photo-diodes
Solar Cells
Optoelectronic Applications
Varactors
Tunable Filters
Transistors
Amplifiers
References
Memory
Power Applications
Advanced Devices
Device and Mixed Mode Simulation.