

1	ECE 525	Modelling and Analysis of Semiconductor Devices	Semiconductor Physics, Modelling Bipolar Devices, MOSFET Modelling, Passive Devices, Parameter Measurements
2	ECE 526	Fundamentals of VLSI Design	MOSFETs Fundamentals, Circuit Characterization And Performance Estimation, CMOS Circuits, Systems Design And Design Method, CMOS Sub System Design
3	ECE 527	VLSI Technology	IC Fabrication Technologies, Fabrication of Semiconductor Devices, CMOS Technology, CMOS Logic Systems, GaAs Fabrication
4	ECE 528	DSP for VLSI	Introduction to DSP Systems, Algorithmic Transformations, Systolic Architecture Design and Fast Convolution, Algorithm Strength Reduction in filter, Pipelined and Parallel Recursive and Adaptive Filters
5	ECE 529	ASIC Design and FPGA	Introduction To ASIC and VHDL, Programmable ASICS, Programmable ASIC Interconnect & Software, ASIC Construction & FPGA partitioning, Design using Xilinx
6	ECE 530	CAD For VLSI	VLSI Design Methodologies, Design Rules, Physical Design Automation Algorithms, Simulation, Modelling and Synthesis
7	ECE 531	Embedded Systems Design	Embedded Processing, Embedded Processors, Networks, RTOS and Application Design, System Design Techniques and Simulation
8	ECE 532	VLSI Testing and Fault Tolerance	Physical Fault Modeling And Basics Of Testing, Test Generation For Combinational And Sequential Circuits, Design For Testability, Self Test And Test Algorithms, Fault Diagnosis