

MOS Transistor Principle – Prof Deleep R Nair, IIT Madras

Relevant course: Digital VLSI

Relevant department: EEE,ECE

Pre requisite: Basic knowledge of semiconductor device physics

Course outline:

MOS devices- Concept of Accumulation, depletion and inversion; Capacitance-voltage characteristics

MOS Transistors- Current-Voltage characteristics, Threshold Voltage and Body effect, DIBL and Short-channel effects, Brief introduction of FinFET