

Course Description for EE491/591 Analog Circuits

This course will focus on the analysis, design, simulation and mask-level chip layout of analog circuits and system. The course begins with a brief review of MOSFET operation and large and small signal models. Much of the course will involve the design and analysis of analog building blocks such as current mirrors, transconductance amplifiers, capacitors, multipliers, current mirrors and D/A and A/D circuits. Simultaneously, the course will cover IC design and layout techniques, low voltage/power issues, and system analysis. The course will conclude by looking at sensor applications. A final project consisting of a complete IC layout will be required.