

Digital Electronics; [3 Cr. H]	0904420	Pre-req. [0904328+0904234]
<p>Properties and definitions of Digital ICs, Propagation delay times, power dissipation, and noise margin, etc..., diodes, diode resistor logic, BJTs. The Ebers-Moll model, Introduction to Bipolar Digital Circuits, Resistor Transistor Logic (RTL), Diode-Transistor Logic(DTL), Transistor-Transistor Logic (TTL) gates, basic Emitter-Coupled Logic (ECL), MOSFET, Introduction to MOS Digital Circuits, Transmission Gates, Loaded NMOS Inverter, CMOS Combinational Logic Gates, Design of MOS and bipolar logic families, and BiCMOS. Combinational and sequential logic circuit design, interfacing Logic Families, Semiconductor memories Random Access Memories (RAM) .and Read-only Memories ROM</p>		