

**EE-206**  
**Course Objectives**

<u><b>Content</b></u>	<u><b>Objectives</b></u>
PSPICE© Industry Standard Simulation Program	Design schematics, simulate, plot, and print results.
Professional Quality Reports	Produce comprehensive Engineering Design documentation to professional industry standards
Industry Standard Breadboard	Assemble passive and active components into working circuits.
Computer Clock and Timing	Design synchronous timing and control circuits to specifications.
SOP and POS Logic	Design general purpose logic to specification using both SOP and POS.
Array Logic Implementation	Learn array logic personalizer programming language, and design And implement a logic sub-function using this technique.
Adder / Subtractor Subsystems	Design Arithmetic Units implementing radix complement techniques.
Encryption Synchronization Detection	Design synchronous sequential encryption synchronization frame detection and de-encryption control logic to secure specification.
Complex Circuit Nodal Analysis	Analyze given complex nodal networks for voltages and currents.
Passive Filters	Design High Pass, Low Pass, Band Pass and Band Stop filters to specification.
Operational Amplifiers	Design Non-Inverting, Inverting, Differentiating, and Integrating amplifiers to specification to demonstrate differential equations.