

# CERTIFICATE IN MIXED-SIGNAL INTEGRATED CIRCUIT DESIGN

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Units required for Certificate: 16

## Program Description

The certificate in mixed-signal integrated circuit design will recognize the commitment and accomplishments of graduate students studying in this area, and provide potential employers with evidence of the skills students have developed. Graduate students studying mixed-signal integrated circuit (IC) design will become knowledgeable and proficient in the different skills this demanding field requires. This requires studying multiple subjects such as amplifier design, device physics and matching, analog layout techniques, and key mixed-signal building blocks. In addition, students will learn the methods and tools used to design and layout ICs.

## Program Requirements

Code	Title	Units
<b>Required Lower Division Courses (13 Units)</b>		
EEE 230	Analog and Mixed Signal Integrated Circuit Design	3
EEE 231	Advanced Analog and Mixed Signal Integrated Circuit Design	3
EEE 232	Key Mixed-Signal Integrated Circuit Building Blocks	3
EEE 235	Mixed-Signal IC Design Laboratory	1
EEE 236	Advanced Semiconductor Devices	3
<b>Required Electives (3 Units)</b>		
Select one of the following:		3
EEE 110	Advanced Analog Integrated Circuits	
EEE 234	Digital Integrated Circuit Design	
EEE 238	Advanced VLSI Design-For-Test I	
EEE 239	Advanced VLSI Design-For-Test II	
<b>Total Units</b>		<b>16</b>