

SEMICONDUCTOR ENGINEERING AND PHYSICS UNDERGRADUATE CERTIFICATE

The Undergraduate Certificate in Semiconductor Engineering and Physics (UCSEP) will certify that undergraduate students have received specific instruction and experiences in semiconductor engineering and/or physics. Students will complete coursework in the areas of semiconductor device physics, design, processes and/or metrology with a significant experiential learning experience. This interdisciplinary certificate will be accessible to students from electrical engineering, physics, and other technical majors.

REQUIREMENTS

Minimum of 17 credits required.

CORE REQUIREMENTS (8 Credits)		
EE 3420	Integrated Circuit Fabrication	4
or PHYS 3165	Integrated Circuit Fabrication	
EE 3440	Semiconductor Materials/Devic	4
or PHYS 3675	Semiconductor Materials/Devic	
CHOOSE 6 CREDITS FROM THE FOLLOWING PREAPPROVED ELECTIVES:		
PHYS 3400	Thermal & Statistical Physics	3
PHYS 3650	Intro to Solid State Physics	3
PHYS 4100	Experimental Physics II	3
EE 5410	Digital VLSI Circuit Design	3
EE 5430	RF Circuit Design	3
EE 5810	Digital Computer Design	3
CHOOSE 3 CREDITS FROM THE FOLLOWING CREDIT BEARING EXPERIENCES: ¹		
PHYS 3991	Internship	1-6
or CEMS 3991	Internship	
PHYS 3995	Undergraduate Research	1-6
or EE 3995	Undergraduate Research	
EE 4200	Capstone Design II	3
or ME 4020	Capstone Design II	
EE 2996	College Honors	1-6
or ME 2996	College Honors	

¹ Topic must be relevant to Semiconductor field.