ECEn 452. Experiments in Integrated Circuit Development

Catalog Description:	**ECEn 452. Experiments in Integrated Circuit Development.** (1:0:3) W Measurements of key silicon properties and fabrication of integrated circuits.	
Course Type:	Engineering Topics	
Prerequisites:	ECEn 450 or concurrent enrollment.	
Textbooks and/or other required materials	S.M. Sze, *Semiconductor Devices, Physics and Technology - 2nd Edition*, John Wiley & Sons, 2002, ISBN 0-471-33372-7.	
Topics Covered:	Basic Semiconductor fabrication principles including lithography, wet and dry etching, thin film deposition, oxide growth, and dopant diffusion. Hands-on activities include fabricating and measuring MOSFETs	
Course Competencies:	Ability to analyze and interpret data measured from fabricated devices	Outcome 2
	Ability to design processes for fabrication of MOSFET devices.	Outcome 3
	Ability to use modern microelectronics fabrication equipment.	Outcome 11
Schedule:	Lectures: (None) Laboratory: 3 hours per week TA Recitations: (None)	
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