

2013 Scanning Sheet. Assignment Description: \_\_\_\_\_ Instructor: \_\_\_\_\_ Date: \_\_\_\_\_ Scanned File Name: \_\_\_\_\_

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EET 492 Integrated Circuit Technology (4) - Outcomes Reviewed 2013
A	B	C	D	E	F	G	H	I	J	K				
2	2	1	1		1		2	2	1	1			1	Recognize and contrast different types of IC and discrete devices
2	2	1	1		1		2	2	2	2			2	industry
2	2	2	1	1	2		2	1	1				3	Understand different parameters in integrated circuit fabrication which controls electrical characteristics
2	2	2	1		1	1	1	1	2	1			4	Understand and analyze oxidation, diffusion, ion implantation, thin film deposition, metallization, and photolithography processes
2	2	2	2		1	1	2	2	1	1			5	Understand the etching and importance of dry etching in modern IC fabrication:
2	2	2	1		2		2		1	1			6	Understand and implement multilevel-interconnects
1	2	2	1		2	1	1	1	1	1			7	Understand the assembly, packaging, and yield calculations
	2	2	1	2	1	2	1	1	1	1			8	Able to measure resistivity and conductivity type of wafers
2	2	2	1	2	1	2	1	1	1	1			9	Implement fabrication steps in lab such as oxidation, photolithography, diffusion, and metallization
2	2	2	1	2	1	2	1	1	1	1			10	Electrical testing of the fabricated chip

1=supporting contribution

2=significant contribution

Rubric  5: Excellent Mastery of Outcome By Vast Majority of Students  4: Good Mastery of Outcome By Vast Majority of Students 3: Adequate Mastery of Outcome By Majority of Students 2: Marginal Mastery of Outcome By Most Students  1: Lack of Mastery of Concept By Most Students	a.	an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly defined engineering technology activities
	b.	an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies
	c.	an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes
	d.	an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives
	e.	an ability to function effectively as a member or leader on a technical team
	f.	an ability to identify, analyze, and solve broadly-defined engineering technology problems
	g.	an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature
	h.	an understanding of the need for and an ability to engage in self-directed continuing professional development
	i.	an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity
	j.	a knowledge of the impact of engineering technology solutions in a societal and global context; and
k.	a commitment to quality, timeliness, and continuous improvement.	

Improvement Suggestions or Comments: