

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

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EET 221 Electronic CAD (3) - Outcomes Reviewed 2013
A	B	C	D	E	F	G	H	I	J	K				
1													1	Correctly hand letter basic engineering drawings.
2						2							2	Use drafting software to create 2-D mechanical drawings.
1						1							3	Correctly dimension mechanical drawings.
2	1					2							4	Use a CAD package to generate circuit board schematics.
2	1					2							5	Use a CAD package to generate Printed Circuit Board (PCB) layouts.
2	1				1		2	1	1	1			6	Identify electronic package types and use the associated SMT, through hole, and connector footprints.
1						1							7	Present the process flow for the ordering of and the manufacturing of PCBs in a graphical form such as a flow chart or block diagram.
1													8	Create a scheduling time line for the ordering of prototype boards and their revisions, and include a budget for the process.
1													9	Determine the amount of current that different sized traces can carry.
1							1						10	Demonstrate knowledge of different CAD and schematic/PCB design tools available.
	2				2		2	2	2	2			11	Demonstrate knowledge of the environmental implications of different PCB manufacturing and assembling processes.
2	1		1		2		1	1	1	2			12	Demonstrate knowledge of the different types of connectors and the appropriate environments and applications to use them in.

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:
