

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

ABET Outcomes											Rubric or student %	Example problem	Outcome #	EET 355 Electrical Power Systems (3) – Outcomes Reviewed 2013
A	B	C	D	E	F	G	H	I	J	K				
2	1	1	1		1								1	Define prime movers and environmental impacts of power generation.
2	1	1	1		1								2	Determine the power (P, Q, S), power triangle and power factor (relationships between real and complex power) and power factor for electric circuits/systems.
2	1	1	1		1								3	Determine voltages, currents and power in three-phase circuits including phasor representation.
2	1	1	1		1								4	Determine B and H in magnetic circuits and describe μ and hysteresis.
2	1	1	1		1								5	Determine induced voltages produced by Faraday's law of electromagnetic induction applied to toroids, transformers and generators.
2	1	1	1		1	1							6	Describe construction and operation of 3-phase synchronous generators and determine the magnitude, Hz, ω_m , of the generated voltage.
2	1	1	1		1	1							7	Describe the construction and operation of power transformers and determine voltages and currents.
2	1	1	1		1	1							8	Describe transmission/distribution and protection of the electrical grid from faults and voltage surges.
		1			1								9	Describe and analyze simple transmission line models.
					1						1		10	Determine and numerically compute power flow in large scale power systems.
				1	1						1		11	Develop power system simulations using PowerWorld.

Total Significant Course Outcomes Mappings a-k

A	B	C	D	E	F	G	H	I	J	K
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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: