

GAPS Analysis Summary

Standards ABET-Engineering

a. apply math, science, engineering	b. design/conduct experiments; analyze, interpret data	c. design system, component, process-given constraints, etc.	d. function on interdisciplinary teams	e. identify, formulate, solve engineering problems	f. understand professional, ethical responsibility	g. ability to communicate effectively	h. undst. impact eng. Sol global, economic, evnir., society	i. recognition of need for, and ability to engage in life-long learning	j. Knowledge in contemporary issues	k. ability to use techniques, skills, and modern engineering tools

Standards ABET/TAC/NAIT-Engineering Technology and Industrial Technology

a. mastery of knowledge, techniques, skills, modern tools	b. ability to apply current knowledge; adapt to emerging applications of math, science, technology	c. ability to conduct, analyze, interpret experiments; apply experimental results to improve processes	d. ability to apply creativity in design of systems, components, processes	e. ability to function effectively on teams	f. ability to identify, analyze, solve technical problems	g. ability to communicate effectively writing	h. ability to communicate effectively orally	i. recognize need for, ability to engage in lifelong learning	j. ability to understand professional, ethical, social responsibilities	k. respect for diversity; knowledge of contemporary professional, societal, global issues	l. commit to quality, timeliness, continuous improvement	m. ability to program computers and/or use computer applications effectively	n. ability to use modern laboratory techniques, skills, equipment effectively	o. ability to manage projects effectively	p. ability to design, manipulate, manage industrial systems	q. ability to manage or lead personnel effectively

NIU General Education

Writing	Speaking	Listening	Quantitative Reasoning	Use of Resources-Technology	Historical Development Of Culture	Significance of Arts	Cultural Traditions Philosophical Ideas	Methods in Science Methods in Social Science	Interrelatedness Across Disciplines	Social Responsibility Citizenship

Student Learning Outcomes & Teaching Models

Outcomes	Mem	Prog Part	Adv O	Lec	Rec Tch	Mast Learn	Coop Learn	Graphic Org	Concept Attainm	Conc Form	Conc Pres	Con-ceptual	Induct	Deduct	Inquiry	Sim-ulate	JurisP	Direct Instr	Train	Synect	Psycho-motor	Meta-phore	Non-direct	Role

Student Learning Outcomes & Teaching Styles

Outcomes	Command	Practice	Reciprocal	Self-Check	Inclusion	Guided Discovery	Convergent Discovery	Divergent Production	Learner Designed	Learner Initiated	Self Teaching

Student Learning Objectives/Outcomes & Learning Styles

Objectives	Concrete Experience	Abstract Conceptualization	Active Experimentation	Reflective Observation

Student Learning Objectives/Outcomes & Bloom & Dale

Objectives	Dale's Cone Levels P A A+	Knowledge Remember	Comprehension Understand	Application Apply	Analysis Analyze	Synthesis Evaluate	Create	Critical Thinking Level L M H