

## Industrial Engineering Mapping of Courses to Program Outcomes

<b>Program Outcomes</b>
<b>Outcome A:</b> IE graduates demonstrate the ability to apply knowledge of mathematics, science, and engineering
<b>Outcome B:</b> IE graduates demonstrate the ability to design and conduct experiments, as well as to analyze and interpret data
<b>Outcome C:</b> IE graduates demonstrate the ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
<b>Outcome D:</b> IE graduates demonstrate the ability to function on multidisciplinary teams by demonstrating proficiencies
<b>Outcome E:</b> IE graduates demonstrate the ability to identify, formulate, and solve industrial engineering problems
<b>Outcome F:</b> IE graduates demonstrate an understanding of professional and ethical responsibility
<b>Outcome G:</b> IE graduates demonstrate the ability to communicate effectively
<b>Outcome H:</b> IE graduates demonstrate having the broad education necessary to understand the impact of engineering solutions in a global and societal context
<b>Outcome I:</b> IE graduates demonstrate that they recognize the need for and possess the ability to engage in lifelong learning
<b>Outcome J:</b> IE graduates demonstrate that they possess a knowledge of contemporary issues
<b>Outcome K:</b> IE graduates demonstrate that they possess an ability to use the techniques, skills, and modern engineering tools necessary for industrial engineering practice

	Primary outcomes – measured in all required courses
	Secondary outcomes – measured in several required courses
	Tertiary outcomes – measured in a few courses (design courses – ISEN 416, ISEN 459)

Course	Outcomes											Coordinator
	A	B	C	D	E	F	G	H	I	J	K	
ISEN 220	X				X						X	Butenko
ISEN 303	X				X						X	Smith
ISEN 314	X	X	X	X	X						X	Ding
ISEN 315	X				X						X	Gaukler
ISEN 316	X				X						X	Wortman
ISEN 416	X		X	X	X		X		X		X	Uster
ISEN 420	X				X		X				X	Ntaimo
ISEN 424	X	X			X		X				X	Feldman
ISEN 459	X	X	X	X	X	X	X	X	X	X	X	Klutke
<b>Maps to Program Educational Objective(s)</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1, 2</b>	<b>1</b>	<b>1, 2</b>	<b>1, 2</b>	<b>1, 2, 3</b>	<b>1, 3</b>	<b>1, 2, 3</b>	<b>1</b>	