

Updated 2021-2024

<p><b>Mapping of program outcomes to curriculum</b></p>	<p>1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.</p>	<p>2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.</p>	<p>3. An ability to communicate effectively with a range of audiences</p>	<p>4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.</p>	<p>5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives</p>	<p>6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions</p>	<p>7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.</p>
<p><b>Engineering Core</b></p>							
<p>ENGR 200 - Introduction to Engineering and Design</p>		<p>I</p>	<p>I</p>	<p>I</p>	<p>I</p>		
<p>ENGR 210 - Manufacturing Materials and Processes</p>	<p>I</p>				<p>I</p>	<p>I</p>	
<p>ENGR 215 - Computational Methods in Engineering</p>	<p>I</p>						<p>I</p>
<p>ENGR 220 - Statics</p>	<p>D</p>						<p>I</p>
<p><b>Program Required Courses</b></p>							

ENGR 320 - Engineering Economics	D	D			I		
INDE 330 - Engineering Statistics and Probability	D					I	
INDE 340 - Design of Engineering Experiments	D					D	
INDE 360 - Operations Research	D						D
INDE 390 - Human Factors and Work Methods		D	D	D	D		
INDE 410 - Facility Planning, Design and Material Handling	D	D			D	M/A	D
INDE 420 - Discrete Event Simulation	D		D			D	D
INDE 430 - Design of Work Systems	D				D		
INDE 440 - Sustainable Production and Supply Chain Systems	D	D	D		D		D
INDE 450 - Systems Quality & Reliability	M	D				M	D
INDE 460 - Service and Manufacturing Systems Modeling	M/A	M/A	D	D	D	M	M
INDE 492 - Senior Design Units: 4	M	M	M/A	M/A	M/A	M	M/A

Evaluation of outcomes for Industrial Engineering I=introduction, D=development, M=mastering A=assessed

2023-2024 ABET (EAC) Outcomes

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.