Updated 2021-2024

Opuated 2021-2024	-						
Mapping of program outcomes to curriculum	I. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.	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, environment al, and economic factors.	3. An ability to comm unicat e effecti vely with a range of audie nces a	4. An ability to recogniz e ethical and professio nal responsi bilities in engineeri ng situation s and make informed judgmen ts, which must consider the impact of engineeri ng solutions in global, economi c, environ mental, and societal contexts.	5. An ability to functi on effecti vely on a team whose members togeth er provid e leader ship, create a collab orativ e and inclus ive environment, establi sh goods, plan tasks, and meet object ives	6. An ability to develop and conduct appropriate experiment ation, 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.
ENGR 200 - Introduction to			7	,	I		,
Engineering and Design (3)			I	1	I		I
ENGR 215 – Computational	1						
Methods in Engineering (3)							
CIVE 206 –Engineering Materials and Laboratory (3)		1				1	
CMGT 201 - Surveying (2)				D			
ENGR 220 - Statics (3)	D						
CIVE 319 - Fluid Mechanics (3)							D
CIVE 330 - Strength of Materials	М					M/A	
(3) CIVE 350 - Geotechnical						D	
Engineering (3)							
CIVE 361 - Transportation Engineering (3)		D					
CIVE 385 - Structural Analysis (3)		М					
CIVE 410 - Hydraulics and Water Resources (3)				D			
CIVE 421 - Structural Engineering Design (4)							M/A
CIVE 430 - Environmental Engineering and Sustainability (3)		M/A		M			
CIVE 435 - Highway and Pavement Design (3)	M/A						
CIVE 440 - Construction Engineering (3)			M/A				
CIVE 492 - Senior Design Project		М			M/A		
ENGR 320 - Engineering Economics (3)			D	M/A	D		

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.