



## Consistency between Student learning Outcomes and NCAAA Outcomes College: Engineering Department: Civil and Environmental Engineering Program: Civil Engineering

Code MUP05

**ABET Student Outcomes** d k a b С e g h a1 a2 Α a3 Outcomes b1 b2 В b3 Student Learning c1 c2 С c3 d1 d2 D **d3** e1 E e2 e..

(A) knowledge

(B) cognitive skills

(C) interpersonal skills and responsibility

(D) communication, information technology and numerical skills

(  ${\bf E}$  ) Psychomotor skills





The CE program is following ABET criteria, thus the following are the expected Student Learning Outcomes.

## **Student Learning Outcomes (ABET):**

a	An ability to apply Knowledge of mathematics, science and engineering		
b	An ability to design and conduct experiments, analyze and interpret data		
С	An ability to design a system, component or process to meet desired needs within realistic constraints		
d	The ability to function on multidisciplinary teams		
e	An ability to identify, formulate, and solve engineering problems		
f	An understanding of professional and ethical responsibility		
g	An ability to communicate effectively		
h	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context		
i	A recognition of the need for and an ability to engage in lifelong learning		
j	A knowledge of contemporary issues		
k	Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice		





## Student Learning Outcomes (CE Program)

Domain	CODE	Student Learning Outcomes
	a1	An ability to apply principles of engineering, mathematics, and science in application of Engineering & Technology.
Α	a2	An ability to demonstrate knowledge of contemporary engineering issues
	a3	An ability to use engineering skills, tools and techniques necessary for engineering practices
	b1	An ability to conduct experiments and interpret the results
В	b2	An ability to design engineering system to meet specific needs.
	b3	Ability to model engineering problems.
	c1	An ability to take roles in collaborative teams.
С	c2	An ability to take professional and ethical responsibility.
	c3	
	d1	An ability to present technical & communication skills effectively
D	d2	An ability to account for environmental, economic and safety factors in solving engineering problems
	d3	An ability to engage in life-long learning.
	e1	NA
Е	e2	
	e	