

## ABET Outcome Survey

Important Note: These outcomes reflect a personal (student) assessment of the course, not the instructor's assessment.

ABET Outcomes for AE 481W/482	Outcome not able to be assessed	Level of ability demonstrated but below acceptable	Minimum acceptable level of ability demonstrated	More than minimum level of ability demonstrated
	(Score of 0)	(Score of 1)	(Score of 2)	(Score of 3)
a. An ability to apply knowledge of mathematics, science, and engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
b. An ability to analyze and interpret data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
c. An ability to design a system, component, or process to meet desired needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
e. An ability to identify, formulate, and solve engineering problems	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
f. An understanding of professional and ethical responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
g. An ability to communicate effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
h. The broad education necessary to understand the impact of engineering solutions in a global and societal context	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
i. An ability to engage in life-long learning	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>	<input type="checkbox"/>
j. A knowledge of contemporary issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>
k. An ability to use the techniques, skills, and modern engineering tools necessary for engineering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>X</b>

practice				
o. Engineering design capabilities in at least two (2) of the (3) basic curriculum areas of architectural engineering, and that design has been integrated across the breadth of the program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
p. Communication and interaction with other design professionals in the execution of building projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

### **AE 481W/482 Course Reflection**

Overall this project greatly enhanced my undergraduate education. Analyzing the TED's existing mechanical system during the first semester allowed me to gain a better understanding of how building mechanical systems are designed and operated. Additionally, having the freedom to design new mechanical systems during the second semester allowed me to combine innovative systems with my own ideas. In doing so, I was able to recognize the advantages and disadvantages of different systems, particularly geothermal and radiant floor systems. Lastly, the inclusion of breadth analyses on the effect my new mechanical systems had on the construction management and electrical system of the TED made me explore how design decisions for one system affect the entire building.

### **CPEP Reflection**

The creation of a personal website for displaying work performed for the project had many advantages. The most important is that it allows potential employers or industry leaders to get a glimpse of the type of work I do. Additionally, it gives friends or family who often ask what I do in school an opportunity to see and read for themselves not only what Architectural Engineers do, but the impact we can have on the world around us.