

Table 3.1. Mapping of Program Outcomes into the CEE Curriculum

Program Outcomes	CEE Courses												
	211	212	260	303	325	351	360	401	412	413	415	421	428
a. an ability to apply knowledge of mathematics, science and engineering	XX	XX	XX	XX	XX	XX	XX			XX	XX	XX	XX
b. an ability to design and conduct experiments, as well as analyze and interpret data		X		X	XX	XX	XX		XX			X	X
c. an ability to design a system, component, or process to meet desired needs		X	X	XX		X	X		X	XX	XX	XX	XX
d. an ability to function on multidisciplinary teams			X		X	X	X	X	X	X	XX	XX	XX
e. an ability to identify, formulate and solve engineering problems	XX	XX	XX	XX	XX	XX	XX		XX	XX	X	XX	XX
f. an understanding of professional and ethical responsibility		X	X					XX	X	X	X		
g. an ability to communicate effectively	X	XX		X	XX	X	X	XX	X	X	X	X	X
h. the broad education necessary to understand the impact of engineering solutions in a global/ societal context		X	X			X		XX				X	X
i. a recognition of the need for and an ability to engage in life-long learning		X		X		X	X	XX	X	X	X	X	X
j. a knowledge of contemporary issues		X	X	X			X	XX	X			X	X
k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	X	XX	X	XX	XX	XX	XX		XX	XX	XX	XX	XX
l. A proficiency in a minimum of four major civil and environmental engineering areas					XX	XX			XX	XX	XX	XX	
m. An understanding of professional practice issues such as procurement of work and the importance of licensure	X					X		XX	X	X	X	X	

XX: strong relationship (significant focus in this area)

X: weak relationship (minimal focus in this area)

Table 3.1. Mapping of Program Outcomes into the CEE Curriculum (continued)

Program Outcomes	CEE Courses												
	431	432	445	460	526	536	537	545	546	547	554	581	582
a. an ability to apply knowledge of mathematics, science and engineering	X	XX	XX	XX	X	XX	X	XX	XX	XX	XX	XX	XX
b. an ability to design and conduct experiments, as well as analyze and interpret data	X	X	XX	X		X	X	X	X	X			XX
c. an ability to design a system, component, or process to meet desired needs	XX	XX		XX	XX	XX	X			XX	XX	XX	X
d. an ability to function on multidisciplinary teams	XX	X	X	X	X	XX		X	X	X	X	X	X
e. an ability to identify, formulate and solve engineering problems	X	XX	XX	XX	XX	XX	X	XX	XX	XX	X	XX	X
f. an understanding of professional and ethical responsibility	XX	X		X		X	XX						XX
g. an ability to communicate effectively	X	X	XX	X	X	X	X	X	X	X	XX	X	
h. the broad education necessary to understand the impact of engineering solutions in a global/ societal context	X	X		X		X	X				X	X	X
i. a recognition of the need for and an ability to engage in life-long learning	X	X	X	X		X	X	X	X	X	X	X	X
j. a knowledge of contemporary issues	X	X		X	X	X	X	X	X	X	X	X	X
k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	X	XX	XX	XX	XX	XX	X	X	X	XX	XX	XX	XX
l. A proficiency in a minimum of four major civil and environmental engineering areas	X	X	XX	X	XX	X	XX	X	X	X		XX	
m. An understanding of professional practice issues such as procurement of work and the importance of licensure	XX	XX		X		X	X						

XX: strong relationship (significant focus in this area)

X: weak relationship (minimal focus in this area)

#	Course Number																										
	211	212	260	303	325	351	360	401	412	413	415	421	428	431	432	445	460	536	537	526	545	546	547	554	581	582	
	E&E Number																										
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201
6	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216	216
7	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229
8	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230
9	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232
10	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239	239
11	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
12	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
13	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
14	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
15	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
16	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
17	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
18	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
19	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
2	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
21	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
22	121	121	121	121	121	121	121	121	121	212	121	121	121	120	120	121	121	121	120	121	121	121	121	121	121	121	121
23	180	125	122	125	122	125	122	349	125	123	125	125	122	161	121	140	122	125	202	122	140	140	125	202	180	331	
24	199	140	199	199	202	203	141	366	180	198	203	199	199	162	123	350	140	140	205	125	144	207	202	207	203	334	
25	202	173	202	202	254	207	182	368	199	199	207	202	202	167	174	360	356	162		180	207	254	207	217	207	122	
26	219	180	227	228	331	356	203	370	240	202	356	331	207	174	180	340	261	167		902	254	340	219	219	231	143	
27	341	198	369	241	334	360	331	318	254	228	360	334	243	180	182	331		174		903	340	350	360	261	318	203	
28	360	217	163	340	337	366	334	321	337	360	366	337	254	182	217	335		180			350	360	366	323	261	240	
29	321	367	902	354	902			336	323	349	366		340	241	254	261	337		254			360	355	897	908	354	356
30	240	369		355	903				324	360	892			354	331	261	347	338		261					909	356	145

Table 3.2. Course Evaluation Summary Matrix