



CONSTRUCTION SCIENCE
TEXAS A&M UNIVERSITY

Summer 2019

Senior Exit Survey

n = 49

Student

**Self-Reported Confidence and Importance for
COSC Student Learning Outcomes**

Student Learning Outcomes

- Students' confidence in their ability to apply the Student Learning Outcomes (SLOs) ([Table 1](#))

(Frequency counts for individual SLOs may be found in Table 3)

- Students indicated they were **"Very Confident"** in their ability to analyze professional decisions based upon ethical principles
- Students' indicated they were **"Confident"** in their ability to apply the remaining 19 SLOs
 - Top three SLOs students indicated they were **"Confident"** applying
 1. *"Analyze construction documents for planning and management of construction processes"*
 2. *"Understand construction project control processes"*
 3. *"Apply construction management skills as a member of a multi-disciplinary team"*
- Students' perception of the importance of the Student Learning Outcomes (SLOs) in their future careers ([Table 2](#))

(Frequency counts for individual SLOs may be found in Table 4)

- **10 of the 20** SLOs students indicated would be **"Very Important"** in their future careers
 - The top three SLOs student perceived as **"Very Important"**
 1. *"Analyze construction documents for planning and management of construction processes"*
 2. *"Create written communications appropriate to the construction discipline"*
 3. *"Create oral communications appropriate to the construction Industry"*
- The remaining 10 SLOs were perceived as being only **"Important"** to students' future careers

Table 11. Summer 2019: Mean Score of Students' Response to the Question: "As a result of your COSC degree program, how confident do you feel in your ability to:"

SLO #	Student Learning Outcome	<i>n</i>	M	SD	Confidence
6.	Analyze professional decisions based upon ethical principles	48	3.54	0.617	Very Confident
7.	Analyze construction documents for planning and management of construction processes	48	3.44	0.741	Confident
16.	Understand construction project control processes	47	3.43	0.542	Confident
9.	Apply construction management skills as a member of a multi-disciplinary team	48	3.42	0.577	Confident
14.	Understand construction accounting and cost control	48	3.35	0.668	Confident
1.	Create written communications appropriate to the construction discipline	48	3.33	0.663	Confident
2.	Create oral communications appropriate to the construction industry	48	3.31	0.624	Confident
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	48	3.27	0.610	Confident
10.	Apply electronic-based technology to manage the construction process	48	3.27	0.736	Confident
13.	Understand construction risk management	48	3.25	0.668	Confident
15.	Understand construction quality assurance and control	48	3.25	0.729	Confident
8.	Analyze methods, materials, and equipment used to construct projects	48	3.19	0.762	Confident
4.	Create a construction project cost estimate	48	3.19	0.816	Confident
3.	Create a construction project safety plan	48	3.04	0.771	Confident
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	48	3.00	0.772	Confident
11.	Apply basic surveying techniques for construction layout and control	48	3.00	0.799	Confident
20.	Understand the basic principles of mechanical, electrical and piping systems	47	3.00	0.860	Confident
18.	Understand the basic principles of sustainable construction	47	2.89	0.787	Confident
5.	Create construction project schedules	48	2.83	0.859	Confident
19.	Understand the basic principles of structural behavior	47	2.66	0.915	Confident

Note: Very Confident = 3.51 – 4.00; Confident = 2.51 – 3.50; Somewhat Confident = 1.51 – 2.50; Not Confident = 1.00 – 1.50

* Number of participants who answered "Don't Know" were excluded from calculation of Importance Level.

Table 22. Summer 2019: Mean Score of Students' Response to the Question: "How important do you believe each of the following will be in your future career?"

SLO #	Student Learning Outcome	<i>n</i>	M	SD	Importance
7.	Analyze construction documents for planning and management of construction processes	48	3.75	0.438	Very Important
1.	Create written communications appropriate to the construction discipline	48	3.73	0.49	Very Important
2.	Create oral communications appropriate to the construction industry	47	3.72	0.498	Very Important
14.	Understand construction accounting and cost control	48	3.69	0.512	Very Important
5.	Create construction project schedules	48	3.67	0.559	Very Important
16.	Understand construction project control processes	48	3.67	0.559	Very Important
6.	Analyze professional decisions based upon ethical principles	48	3.60	0.574	Very Important
4.	Create a construction project cost estimate	48	3.58	0.613	Very Important
9.	Apply construction management skills as a member of a multi-disciplinary team	47	3.57	0.580	Very Important
15.	Understand construction quality assurance and control	47	3.53	0.620	Very Important
10.	Apply electronic-based technology to manage the construction process	48	3.50	0.652	Important
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	48	3.50	0.684	Important
13.	Understand construction risk management	48	3.48	0.684	Important
20.	Understand the basic principles of mechanical, electrical and piping systems	48	3.44	0.681	Important
8.	Analyze methods, materials, and equipment used to construct projects	48	3.40	0.644	Important
3.	Create a construction project safety plan	47	3.40	0.825	Important
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	48	3.35	0.863	Important
18.	Understand the basic principles of sustainable construction	47	3.15	0.932	Important
19.	Understand the basic principles of structural behavior	48	3.10	0.928	Important
11.	Apply basic surveying techniques for construction layout and control	48	3.02	0.956	Important

Note: Very Important = 3.51 – 4.00; Important = 2.51 – 3.50; Somewhat Important = 1.51 – 2.50; Not Important = 1.00 – 1.50

* Number of participants who answered "Don't Know" were excluded from calculation of Importance Level.

Table 3. Summer 2019: Student Responses to the Question: “As a result of your COSC degree program, how confident do you feel in your ability to:”

n = 49

		Very Confident		Confident		Somewhat Confident		Not Confident	
SLO #	Student Learning Outcomes	<i>f^a</i>	%	<i>f^a</i>	%	<i>f^a</i>	%	<i>f^a</i>	%
6.	Analyze professional decisions based upon ethical principles	29	59.2	16	32.7	3	6.1	--	--
7.	Analyze construction documents for planning and management of construction processes	27	55.1	16	32.7	4	8.2	1	2.0
9.	Apply construction management skills as a member of a multi-disciplinary team	22	44.9	24	49.0	2	4.1	--	--
16.	Understand construction project control processes	21	42.9	25	51.0	1	2.0	--	--
14.	Understand construction accounting and cost control	21	42.9	24	49.0	2	4.1	1	2.0
1.	Create written communications appropriate to the construction discipline	21	42.9	22	44.9	5	10.2	--	--
10.	Apply electronic-based technology to manage the construction process	21	42.9	19	38.8	8	16.3	--	--
4.	Create a construction project cost estimate	20	40.8	18	36.7	9	18.4	1	2.0
2.	Create oral communications appropriate to the construction industry	19	38.8	25	51.0	4	8.2	--	--
15.	Understand construction quality assurance and control	19	38.8	23	46.9	5	10.2	1	2.0
8.	Analyze methods, materials, and equipment used to construct projects	18	36.7	22	44.9	7	14.2	1	2.0
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	17	34.7	27	55.1	4	8.2	--	--
13.	Understand construction risk management	17	34.7	27	55.1	3	6.1	1	2.0
3.	Create a construction project safety plan	14	28.6	23	46.9	10	20.4	1	2.0
20.	Understand the basic principles of mechanical, electrical and piping systems	14	28.6	22	44.9	8	16.3	3	6.1
11.	Apply basic surveying techniques for construction layout and control	14	28.6	21	42.9	12	24.5	1	2.0
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	13	26.5	23	46.9	11	22.4	1	2.0
18.	Understand the basic principles of sustainable construction	11	22.4	21	42.9	14	28.6	1	2.0
5.	Create construction project schedules	10	20.4	24	49.0	10	20.4	4	8.2
19.	Understand the basic principles of structural behavior	9	18.4	18	36.7	15	30.6	5	10.2

Note: ^aFrequencies may not total stated *n* because of missing data.

Table 4. Summer 2019: Student Responses to the Question: “How important do you believe each of the following Student Learning Outcomes will be in your future career?”

n = 49

		Very Important		Important		Somewhat Important		Not Important	
SLO #	Student Learning Outcomes	<i>f</i> ^a	%	<i>f</i> ^a	%	<i>f</i> ^a	%	<i>f</i> ^a	%
7.	Analyze construction documents for planning and management of construction processes	36	73.5	12	24.5	--	--	--	--
1.	Create written communications appropriate to the construction discipline	36	73.5	11	22.4	1	2.0	--	--
2.	Create oral communications appropriate to the construction industry	35	71.4	11	22.4	1	2.0	--	--
14.	Understand construction accounting and cost control	34	69.4	13	26.5	1	2.0	--	--
5.	Create construction project schedules	34	69.4	12	24.5	2	4.1	--	--
16.	Understand construction project control processes	34	69.4	12	24.5	2	4.1	--	--
6.	Analyze professional decisions based upon ethical principles	31	63.3	15	30.6	2	4.1	--	--
4.	Create a construction project cost estimate	31	63.3	14	28.6	3	6.1	--	--
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	29	59.2	14	28.6	5	10.2	--	--
10.	Apply electronic-based technology to manage the construction process	28	57.1	16	32.7	4	8.2	--	--
15.	Understand construction quality assurance and control	28	57.1	16	32.7	3	6.1	--	--
3.	Create a construction project safety plan	28	57.1	11	22.4	7	14.3	1	2.0
13.	Understand construction risk management	27	55.1	18	36.7	2	4.1	1	2.0
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	27	55.1	13	26.5	6	12.2	2	4.1
20.	Understand the basic principles of mechanical, electrical and piping systems	26	53.1	17	34.7	5	10.2	--	--
8.	Analyze methods, materials, and equipment used to construct projects	23	46.9	21	42.9	4	8.2	--	--
18.	Understand the basic principles of sustainable construction	22	44.9	12	24.5	11	22.4	2	4.1
19.	Understand the basic principles of structural behavior	21	42.9	13	26.5	12	24.5	2	4.1
11.	Apply basic surveying techniques for construction layout and control	19	38.8	14	28.6	12	24.5	3	6.1
9.	Apply construction management skills as a member of a multi-disciplinary team	9	18.2	16	32.7	2	4.1	--	--

Note: ^aFrequencies may not total stated *n* because of missing data.