



**CONSTRUCTION SCIENCE**  
TEXAS A&M UNIVERSITY

**Spring 2018**

**Senior Exit Survey**

*n* = 119

**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. *"Create written communications appropriate to the construction discipline"*
    2. *"Apply construction management skills as a member of a multi-disciplinary team"*
    3. *"Create oral communications appropriate to the construction industry"*
- 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)*

- **12 of the 20** SLOs students indicated would be **"Very Important"** in their future careers
  - The top three SLOs student perceived as **"Very Important"**
    1. *"Apply construction management skills as a member of a multi-disciplinary team"*
    2. *"Create written communications appropriate to the construction discipline"*
    3. *"Create oral communications appropriate to the construction Industry"*
- The remaining 8 SLOs were perceived as being only **"Important"** to students' future careers

**Table 1. Spring 2018: 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:"**

<b>SLO #</b>	<b>Student Learning Outcome</b>	<b><i>n</i></b>	<b>M</b>	<b>SD</b>	<b>Confidence</b>
6.	Analyze professional decisions based upon ethical principles	119	3.60	.56	Very Confident
1.	Create written communications appropriate to the construction discipline	119	3.44	.58	Confident
9.	Apply construction management skills as a member of a multi-disciplinary team	119	3.41	.63	Confident
2.	Create oral communications appropriate to the construction industry	119	3.40	.67	Confident
7.	Analyze construction documents for planning and management of construction processes	119	3.40	.63	Confident
8.	Analyze methods, materials, and equipment used to construct projects	119	3.34	.70	Confident
16.	Understand construction project control processes	119	3.27	.62	Confident
15.	Understand construction quality assurance and control	119	3.24	.70	Confident
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	117	3.22	.68	Confident
10.	Apply electronic-based technology to manage the construction process	119	3.17	.84	Confident
13.	Understand construction risk management	119	3.16	.70	Confident
14.	Understand construction accounting and cost control	119	3.03	.71	Confident
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	118	2.97	.79	Confident
20.	Understand the basic principles of mechanical, electrical and piping systems	119	2.92	.73	Confident
18.	Understand the basic principles of sustainable construction	119	2.87	.81	Confident
5.	Create construction project schedules	119	2.87	.78	Confident
4.	Create a construction project cost estimate	117	2.83	.87	Confident
3.	Create a construction project safety plan	119	2.82	.86	Confident
11.	Apply basic surveying techniques for construction layout and control	119	2.61	.87	Confident
19.	Understand the basic principles of structural behavior	119	2.51	.84	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 2. Spring 2018: 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
9.	Apply construction management skills as a member of a multi-disciplinary team	118	3.81	.42	Very Important
1.	Create written communications appropriate to the construction discipline	118	3.81	.44	Very Important
2.	Create oral communications appropriate to the construction industry	118	3.80	.46	Very Important
7.	Analyze construction documents for planning and management of construction processes	118	3.80	.46	Very Important
15.	Understand construction quality assurance and control	118	3.66	.54	Very Important
16.	Understand construction project control processes	118	3.65	.51	Very Important
6.	Analyze professional decisions based upon ethical principles	118	3.64	.59	Very Important
10.	Apply electronic-based technology to manage the construction process	118	3.63	.57	Very Important
5.	Create construction project schedules	117	3.63	.60	Very Important
8.	Analyze methods, materials, and equipment used to construct projects	116	3.61	.59	Very Important
13.	Understand construction risk management	118	3.60	.63	Very Important
14.	Understand construction accounting and cost control	118	3.54	.61	Very Important
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	118	3.43	.69	Important
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	118	3.41	.80	Important
4.	Create a construction project cost estimate	117	3.38	.78	Important
20.	Understand the basic principles of mechanical, electrical and piping systems	118	3.33	.75	Important
3.	Create a construction project safety plan	118	3.27	.82	Important
18.	Understand the basic principles of sustainable construction	117	3.08	.87	Important
11.	Apply basic surveying techniques for construction layout and control	118	2.66	1.04	Important
19.	Understand the basic principles of structural behavior	118	2.60	.95	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 1. Spring 2018: Student Responses to the Question: “As a result of your COSC degree program, how confident do you feel in your ability to:”**

*n* = 119

		Very Confident		Confident		Somewhat Confident		Not Confident	
SLO #	Student Learning Outcomes	<i>f<sup>a</sup></i>	%	<i>f<sup>a</sup></i>	%	<i>f<sup>a</sup></i>	%	<i>f<sup>a</sup></i>	%
6.	Analyze professional decisions based upon ethical principles	75	63.0	40	33.6	4	3.4	--	--
2.	Create oral communications appropriate to the construction industry	59	49.6	48	40.3	12	10.1	--	--
9.	Apply construction management skills as a member of a multi-disciplinary team	58	48.7	52	43.7	9	7.6	--	--
1.	Create written communications appropriate to the construction discipline	57	47.9	57	47.9	5	4.2	--	--
7.	Analyze construction documents for planning and management of construction processes	56	47.1	54	45.4	9	7.6	--	--
8.	Analyze methods, materials, and equipment used to construct projects	55	46.2	50	42.0	13	10.9	1	0.8
10.	Apply electronic-based technology to manage the construction process	48	40.3	48	40.3	18	15.1	5	4.2
15.	Understand construction quality assurance and control	45	37.8	60	50.4	12	10.1	2	1.7
16.	Understand construction project control processes	43	36.1	65	54.6	11	9.2	--	--
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	42	35.3	60	50.4	14	11.8	1	0.8
13.	Understand construction risk management	38	31.9	64	53.8	15	12.6	2	1.7
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	32	26.9	54	45.4	29	24.4	3	2.5
14.	Understand construction accounting and cost control	31	26.1	62	52.1	25	21.0	1	0.8
4.	Create a construction project cost estimate	27	22.7	52	43.7	29	24.4	9	7.6
3.	Create a construction project safety plan	27	22.7	51	42.9	33	27.7	8	6.7
20.	Understand the basic principles of mechanical, electrical and piping systems	25	21.0	62	52.1	30	25.2	2	1.7
18.	Understand the basic principles of sustainable construction	25	21.0	60	50.4	27	22.7	7	5.9
5.	Create construction project schedules	25	21.0	58	48.7	32	26.9	4	3.4
11.	Apply basic surveying techniques for construction layout and control	21	17.6	41	34.5	47	39.5	10	8.4
19.	Understand the basic principles of structural behavior	12	10.1	52	43.7	40	33.6	15	12.6

Note: <sup>a</sup>Frequencies may not total stated *n* because of missing data.

**Table 4. Spring 2018: Student Responses to the Question: “How important do you believe each of the following Student Learning Outcomes will be in your future career?”**

*n= 119*

		Very Important		Important		Somewhat Important		Not Important	
SLO #	Student Learning Outcomes	<i>f<sup>a</sup></i>	%	<i>f<sup>a</sup></i>	%	<i>f<sup>a</sup></i>	%	<i>f<sup>a</sup></i>	%
1.	Create written communications appropriate to the construction discipline	97	81.5	19	16.0	2	1.7	--	--
2.	Create oral communications appropriate to the construction industry	96	80.7	21	17.6	--	--	1	0.8
9.	Apply construction management skills as a member of a multi-disciplinary team	96	80.7	21	17.6	1	0.8	--	--
7.	Analyze construction documents for planning and management of construction processes	96	80.7	21	17.6	--	--	1	0.8
15.	Understand construction quality assurance and control	82	68.9	32	26.9	4	3.4	--	--
6.	Analyze professional decisions based upon ethical principles	82	68.9	29	24.4	7	5.9	--	--
5.	Create construction project schedules	80	67.2	32	26.9	4	3.4	1	0.8
16.	Understand construction project control processes	79	66.4	37	31.1	2	1.7	--	--
10.	Apply electronic-based technology to manage the construction process	79	66.4	34	28.6	5	4.2	--	--
13.	Understand construction risk management	78	65.5	33	27.7	6	5.0	1	0.8
8.	Analyze methods, materials, and equipment used to construct projects	76	63.9	36	30.3	3	2.5	1	0.8
14.	Understand construction accounting and cost control	70	58.8	43	36.1	4	3.4	1	0.8
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	68	57.1	33	27.7	14	11.8	3	2.5
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	64	53.8	41	34.5	13	10.9	--	--
4.	Create a construction project cost estimate	63	52.9	39	32.8	12	10.1	3	2.5
3.	Create a construction project safety plan	58	48.7	36	30.3	22	18.5	2	1.7
20.	Understand the basic principles of mechanical, electrical and piping systems	56	47.1	48	40.3	11	9.2	3	2.5
18.	Understand the basic principles of sustainable construction	45	37.8	40	33.6	28	23.5	4	3.4
11.	Apply basic surveying techniques for construction layout and control	34	28.6	26	21.8	42	35.3	16	13.4
19.	Understand the basic principles of structural behavior	24	20.2	38	31.9	41	34.5	15	12.6

Note: <sup>a</sup>Frequencies may not total stated *n* because of missing data.