CONSTRUCTION SCIENCE
TEXAS A&M UNIVERSITY

Fall 2018

Senior Exit Survey

$n = 99$

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 33)
  - 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. *"Apply construction management skills as a member of a multi-disciplinary team"*
      2. *"Create written communications appropriate to the construction discipline"*
      3. *"Understand construction quality assurance and control"*
- 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 34)
  - **15 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 5 SLOs were perceived as being only **"Important"** to students' future careers

Table 1. Fall 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:"

SLO #	Student Learning Outcome	*n*	M	SD	Confidence
6.	Analyze professional decisions based upon ethical principles	98	3.68	.51	Very Confident
9.	Apply construction management skills as a member of a multi-disciplinary team	99	3.49	.60	Confident
1.	Create written communications appropriate to the construction discipline	99	3.43	.64	Confident
15.	Understand construction quality assurance and control	98	3.40	.68	Confident
7.	Analyze construction documents for planning and management of construction processes	97	3.38	.65	Confident
16.	Understand construction project control processes	99	3.32	.62	Confident
8.	Analyze methods, materials, and equipment used to construct projects	99	3.31	.66	Confident
13.	Understand construction risk management	99	3.30	.68	Confident
2.	Create oral communications appropriate to the construction industry	99	3.29	.67	Confident
10.	Apply electronic-based technology to manage the construction process	99	3.28	.76	Confident
14.	Understand construction accounting and cost control	99	3.23	.70	Confident
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	99	3.21	.73	Confident
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	99	3.10	.83	Confident
3.	Create a construction project safety plan	99	3.08	.79	Confident
4.	Create a construction project cost estimate	99	3.06	.75	Confident
18.	Understand the basic principles of sustainable construction	98	2.99	.84	Confident
5.	Create construction project schedules	99	2.93	.81	Confident
20.	Understand the basic principles of mechanical, electrical and piping systems	99	2.88	.82	Confident
11.	Apply basic surveying techniques for construction layout and control	99	2.82	.88	Confident
19.	Understand the basic principles of structural behavior	99	2.58	.97	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. Fall 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	*n*	M	SD	Importance
7.	Analyze construction documents for planning and management of construction processes	96	3.83	.40	Very Important
1.	Create written communications appropriate to the construction discipline	97	3.78	.44	Very Important
2.	Create oral communications appropriate to the construction industry	97	3.75	.48	Very Important
15.	Understand construction quality assurance and control	96	3.73	.47	Very Important
16.	Understand construction project control processes	97	3.73	.45	Very Important
9.	Apply construction management skills as a member of a multi-disciplinary team	97	3.72	.49	Very Important
6.	Analyze professional decisions based upon ethical principles	96	3.72	.54	Very Important
13.	Understand construction risk management	97	3.71	.50	Very Important
5.	Create construction project schedules	97	3.65	.54	Very Important
10.	Apply electronic-based technology to manage the construction process	97	3.63	.56	Very Important
14.	Understand construction accounting and cost control	96	3.63	.58	Very Important
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	97	3.59	.55	Very Important
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	97	3.58	.59	Very Important
8.	Analyze methods, materials, and equipment used to construct projects	97	3.54	.66	Very Important
4.	Create a construction project cost estimate	97	3.54	.65	Very Important
3.	Create a construction project safety plan	95	3.41	.68	Important
20.	Understand the basic principles of mechanical, electrical and piping systems	97	3.40	.70	Important
18.	Understand the basic principles of sustainable construction	97	3.18	.83	Important
11.	Apply basic surveying techniques for construction layout and control	97	2.85	1.05	Important
19.	Understand the basic principles of structural behavior	97	2.82	1.05	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. Fall 2018: Student Responses to the Question: "As a result of your COSC degree program, how confident do you feel in your ability to:"

n= 99

		Very Confident		Confident		Somewhat Confident		Not Confident	
SLO #	**Student Learning Outcomes**	***f*[a]**	**%**	***f*[a]**	**%**	***f*[a]**	**%**	***f*[a]**	**%**
6.	Analyze professional decisions based upon ethical principles	69	69.7	27	27.3	2	2.0	--	--
9.	Apply construction management skills as a member of a multi-disciplinary team	54	54.5	40	40.4	5	5.1	--	--
1.	Create written communications appropriate to the construction discipline	50	50.5	43	43.4	5	5.1	1	1.0
15.	Understand construction quality assurance and control	49	49.5	40	40.4	8	8.1	1	1.0
7.	Analyze construction documents for planning and management of construction processes	46	46.5	42	42.4	9	9.1	--	--
10.	Apply electronic-based technology to manage the construction process	43	43.4	44	44.4	9	9.1	3	3.0
8.	Analyze methods, materials, and equipment used to construct projects	41	41.4	49	49.5	8	8.1	1	1.0
13.	Understand construction risk management	41	41.4	48	48.5	9	9.1	1	1.0
16.	Understand construction project control processes	40	40.4	51	51.5	8	8.1	--	--
2.	Create oral communications appropriate to the construction industry	40	40.4	49	49.5	9	9.1	1	1.0
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	38	38.4	45	45.5	15	15.2	1	1.0
14.	Understand construction accounting and cost control	37	37.4	49	49.5	12	12.1	1	1.0
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	35	35.4	43	43.4	17	17.2	4	4.0
3.	Create a construction project safety plan	33	33.3	43	43.4	21	21.3	2	2.0
18.	Understand the basic principles of sustainable construction	31	31.3	38	38.4	26	26.3	3	3.0
4.	Create a construction project cost estimate	29	29.3	49	49.5	19	19.2	2	2.0
5.	Create construction project schedules	26	26.3	43	43.4	27	27.3	3	3.0
20.	Understand the basic principles of mechanical, electrical and piping systems	24	24.2	43	43.4	28	28.3	4	4.0
11.	Apply basic surveying techniques for construction layout and control	23	23.2	44	44.4	24	24.2	8	8.1
19.	Understand the basic principles of structural behavior	20	20.2	31	31.3	34	34.3	14	14.1

Note: [a]Frequencies may not total stated *n* because of missing data.

Table 4. Fall 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= 99

		Very Important		Important		Somewhat Important		Not Important	
SLO #	**Student Learning Outcomes**	***f*[a]**	**%**	***f*[a]**	**%**	***f*[a]**	**%**	***f*[a]**	**%**
7.	Analyze construction documents for planning and management of construction processes	81	81.8	14	14.1	1	1.0	--	--
1.	Create written communications appropriate to the construction discipline	77	77.8	19	19.2	1	1.0	--	--
2.	Create oral communications appropriate to the construction industry	75	75.8	20	20.2	2	2.0	--	--
6.	Analyze professional decisions based upon ethical principles	73	73.7	19	19.2	4	4.0	--	--
9.	Apply construction management skills as a member of a multi-disciplinary team	72	72.7	23	23.2	2	2.0	--	--
16.	Understand construction project control processes	71	71.7	26	26.3	--	--	--	--
13.	Understand construction risk management	71	71.7	24	24.2	2	2.0	--	--
15.	Understand construction quality assurance and control	71	71.7	24	24.2	1	1.0	--	--
5.	Create construction project schedules	66	66.7	28	28.3	3	3.0	--	--
10.	Apply electronic-based technology to manage the construction process	65	65.7	28	28.3	4	4.0	--	--
14.	Understand construction accounting and cost control	65	65.7	26	26.3	5	5.1	--	--
17.	Understand the legal implications of contract, common, and regulatory law to manage a construction project	61	61.6	31	31.3	5	5.1	--	--
8.	Analyze methods, materials, and equipment used to construct projects	61	61.6	27	27.3	9	9.1	--	--
12.	Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process	60	60.6	34	34.3	3	3.0	--	--
4.	Create a construction project cost estimate	60	60.6	29	29.3	8	8.1	--	--
20.	Understand the basic principles of mechanical, electrical and piping systems	50	50.5	37	37.4	9	9.1	1	1.0
3.	Create a construction project safety plan	49	49.5	36	36.4	10	10.1	--	--
18.	Understand the basic principles of sustainable construction	41	41.4	34	34.3	20	20.2	2	2.0
11.	Apply basic surveying techniques for construction layout and control	34	34.3	27	27.3	23	23.2	13	13.1
19.	Understand the basic principles of structural behavior	33	33.3	27	27.3	24	24.2	13	13.1

Note: [a]Frequencies may not total stated *n* because of missing data.