## CSM Assessment Results (2017-2018)

## Assessment Results for the CSM Program Objectives

Academic Year: **2017-18** 

Program objectives	Measures	Performance criteria	Data reported	Meet criteria?	Action(s)
Maintain a proper size of the program	The total number of students enrolled in the program during the fall semester	The total number of students enrolled in the program is no less than 300	263	No	The FABE's communication and recruitment staff developed the strategic plan and action items that aim to increase the student enrollment number for the CSM program.
Increase the diversity of student body	% of women and minority students enrolled in the program during the fall semester	Maintain 10% women and minority students, respectively, for the program	6.0% (Women) 12.0% (Minority)	No Yes	Continue the outreach efforts to recruit women and minority students.
Provide extra- curricular opportunities for students	% of students having extra- curricular activities based on the Exit Survey results	Providing extra- curricular opportunities for 50% of students	64%	Yes	No action
Provide students with experiential learning/internship experience	% of students with one or more internships based on the Exit Survey results	Have 100% of students to obtain experiential learning/internship experience and at least 60% of students	100% of students having one internship/59% having 2+ internships	No	No action is needed since the measured performance (59% having 2+ internships) is so close to the 60% goal. We will monitor the

		having two or more internships			performance in next year.
Achieve a high job placement rate for CSM graduates	The 6-month post-graduation placement rate	Over 95% of CSM graduates secure a job within 6 months of graduation	To be available by the end of June	Not available	No action at this stage.
Maintain proper accreditation for the program	The ACCE accreditation status	Maintain accreditation by ACCE	ACCE accredited	Yes	Continue developing the direct assessment methods for some SLOs.

## $Assessment\ Results\ for\ the\ ACCE\ SLOs$

SLO #1 Create written communications appropriate to the construction discipline

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4605 Professional Development II	Combined grade for four writing assignments	75% of students scoring 70% or higher	71.4%	89.0%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.23	
Meet criteria?			Not met based on one direct measure	Met based on two measures	
		Action(s)	Wait for more data and no action taken	No action taken	

SLO #2 Create oral presentations appropriate to the construction discipline

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4605 Professional Development II	Final presentation	75% of students scoring 70% or higher	100%	97.3%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.30	
Meet criteria?			Met based on one direct measure	Met based on two measures	
		Action(s)	No action taken	No action taken	

SLO #3 Create a construction project safety plan

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM2600 Construction Safety and Health	Safety plan assignment	75% of students scoring 70% or higher	Not available	98.8%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	3.72	
		Meet criteria?	Measures not developed	Met based on two measures	
Action(s)			Worked with the instructor to develop the assessment method	No action taken	

SLO #4 Create construction project cost estimates

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM3450 Estimating	Take-home exam for an estimating project	75% of students scoring 70% or higher	Not available	88.3%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.23	
		Meet criteria?	Measures not	Met based on two	
			developed	measures	
	Action(s)			No action taken	
			instructor to		
			develop the		
			assessment method		

SLO #5 Create construction project schedules

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM3451 Scheduling	A schedule lab based on an actual project	75% of students scoring 70% or higher	96.8%	90.5%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.14	
Meet criteria?			Met based on one direct measure	Met based on two measures	
		Action(s)	No action taken	No action taken	

SLO #6 Analyze professional decisions based on ethical principles

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4605 Professional Development II	One ethics essay writing assignment	75% of students scoring 70% or higher	94.5%	90.8%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.36	
Meet criteria?			Met based on one direct measure	Met based on two measures	
		Action(s)	No action taken	No action taken	

SLO #7 Analyze construction documents for planning and management of construction processes

Where	Assessment items	Performance	2016-17	2017-18	2018-19
assessed		criteria		, ==	
CSM3450 Estimating	Homework on structural steel take-off	75% of students scoring 70% or	Not available	94.8%	
		higher			
CSM 3451 Scheduling	Exam on determining construction activities and sequences based on an actual project	75% of students scoring 70% or higher	Not available	97.3%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.14	
		Meet criteria?	Measures not	Met based on	
			developed	three measures	
Action(s)			Worked with the	No action taken	
			instructor to		
			develop the		
			assessment method		

SLO #8 Analyze methods, materials, and equipment used to construct projects

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM 4660 Heavy Construction	Exam based on given project documents and site visit	75% of students scoring 70% or higher	Not available	69.6%	
Management	site visit	mgnei			
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.00	
		Meet criteria?	Measures not developed	Met based on two measures	
Action(s)			Worked with the instructor to develop the assessment method	No action taken	

SLO #9 Apply construction management skills as a member of a multi-disciplinary team

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4900 Construction Management Capstone	Under developed	75% of students scoring 70% or higher	Not available	Not available	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.16	
		Meet criteria?	Measures not developed	Met based on one indirect measure	
		Action(s)	We phased the development of direct measures for SLOs. This SLO was not addressed at this phase.	Worked with the instructor to develop the assessment method	

SLO #10 Apply electronic-based technology to manage the construction process

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4641 Construction Project Management	Average grade for two homework assignments using electronic-based technology to create site utilization plan and request for change order	75% of students scoring 70% or higher	96.8%	90.5%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	3.63	
		Meet criteria?	Met based on one direct measure	Met based on two measures	
		Action(s)	No action taken	No action taken	

SLO #11 Apply basic surveying techniques for construction layout and control

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM2440 Construction Surveying and Site Development	Lab assignment to set up a layout for a simple structure using the Total Station	75% of students scoring 70% or higher	Not available	100%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	3.84	
		Meet criteria?	Measures not developed	Met based on two measures	
		Action(s)	Worked with the instructor to develop the assessment method	No action taken	

SLO #12 Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4642 Construction Contracts & Documents	17 selected questions in the midterm	75% of students scoring 70% or higher	Not available	87.7%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.02	
		Meet criteria?	Measures not developed	Met based on two measures	
Action(s)			Worked with the instructor to develop the assessment method	No action taken	

SLO #13 Understand construction risk management

Where	Assessment items	Performance	2016-17	2017-18	2018-19
assessed		criteria			
CSM4642	Average grade for	75% of students	Not available	87.7%	
Construction	midterm and final	scoring 70% or			
Contracts &		higher			
Documents					
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.12	
		Meet criteria?	Measures not	Met based on two	
			developed	measures	
		Action(s)	Worked with the	No action taken	
			instructor to		
			develop the		
			assessment method		

SLO #14 Understand construction accounting and cost control

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4900 Construction Management Capstone	A homework assignment related to applying cost code and type to estimated costs	75% of students scoring 70% or higher	76.1%	72.4%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	3.53	
		Meet criteria?	Met based on one direct measure	Met the indirect measure but slightly below the direct measure criteria	
		Action(s)	No action taken	Wait for more data and no action taken	

SLO #15 Understand construction quality assurance and control

Where	Assessment items	Performance	2016-17	2017-18	2018-19
assessed		criteria			
CSM4641 Construction Project Management	A homework assignment to create a quality control plan based on given construction documents	75% of students scoring 70% or higher	100%	97.0%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.02	
		Meet criteria?	Met based on one direct measure	Met based on two measures	
		Action(s)	No action taken	No action taken	

SLO #16 Understand construction project control processes

Where	Assessment items	Performance	2016-17	2017-18	2018-19
assessed		criteria			
CSM4641	A homework	75% of students	100%	95.5%	
Construction	assignment to create	scoring 70% or			
Project	bid packages from a set	higher			
Management	of contract				
	specifications				
Exit Survey	Question on how a	Average score	Not available	3.91	
	student feels that	3.5 or higher on			
	he/she was prepared to	a scale of 1-5			
	accomplish this SLO				
		Meet criteria?	Met based on one	Met based on two	
			direct measure	measures	
		Action(s)	No action taken	No action taken	

SLO #17 Understand the legal implications of contract, common, and regulatory law to manage a construction project

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM4642 Construction Contracts & Documents	Average grade for midterm and final	75% of students scoring 70% or higher	96.1%	96.9%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	4.05	
		Meet criteria?	Met based on one direct measure	Met based on two measures	
		Action(s)	No action taken	No action taken	

SLO #18 Understand the basic principles of sustainable construction

Where	Assessment items	Performance	2016-17	2017-18	2018-19
assessed		criteria			
CSM4900 Construction	To be developed	75% of students scoring 70% or	Not available	Not available	
Management		higher			
Capstone		8			
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	3.74	
		Meet criteria?	Measures not developed	Met based on one indirect measure	
		Action(s)	We phased the development of direct measures for SLOs. This SLO was not addressed at this phase.	Worked with the instructor to develop the assessment method	

SLO #19 Understand the basic principles of structural behavior

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM3545 Structures for Construct Managers I	Average grade of three midterms	75% of students scoring 70% or higher	42.7%	58.8%	
CSM3546 Structures for Construct Managers II	Average grade of three midterms	75% of students scoring 70% or higher	70.8%	72.5%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	3.72	
		Meet criteria?	Not met based on two direct measures	Met one indirect measure but not met the two direct measure	
		Action(s)	Wait for more data and no action taken	Based on the two- year data, it seemed that student performance improved in the 2 <sup>nd</sup> structure course. Wait for more data to take action.	

SLO #20 Understand the basic principles of mechanical, electrical and piping system

Where assessed	Assessment items	Performance criteria	2016-17	2017-18	2018-19
CSM2310 Electrical & Lighting Systems for Buildings	Average grade of two midterms	75% of students scoring 70% or higher	91.0%	64.6%	
CSM 2345 Mechanical Systems for Buildings	Average grade of three midterms	75% of students scoring 70% or higher	94.7%	88.5%	
Exit Survey	Question on how a student feels that he/she was prepared to accomplish this SLO	Average score 3.5 or higher on a scale of 1-5	Not available	3.98	
		Meet criteria?	Met based on two direct measures	Met one direct and one indirect measures but not met another direct measure	
	Action(s)			Wait for more data and no action taken	