Course	Method	Performance Indicator	Percentage of Students Obtained 80%						Attained?
			Term	Ν	%	Term	Ν	%	
Outcome (a)									
CM 160	Quiz	Composition and use of construction materials and products				S18	19	74	No
CM 214	Exam	Calculate right triangle parameters	F16	22	61	F17	25	38	No
CM 216	Quiz	Describe primary and secondary site investigation strategies				S18	16	94	Yes
CM 233	Quiz	Estimate construction quantities (Quantity take-off)				F17	17	88	Yes
CM 318	Assignment	Estimate construction quantities (Quantity take-off)				S18	12	25	No
CM 331	Assignment	Calculate the centroid and the moment inertia	S17	16	75	S18	17	95	Yes
CM 412	Assignment	Calculate a wall U-factor given specific building materials	S17	23	74	S18	13	77	No
CM 448	Final Exam	Calculate the bearing capacity of soils for foundation design				F17	14	93	Yes
Outcome (b	Outcome (b)								
CM 190	Lab	Design and conduct experiments of concrete test	S17	14	100	S18	14	100	Yes
CM 216	Test	Describe testing techniques for different building materials				S18	16	44	No
CM 224	Lab	Differential Leveling Exercise	F16	5	80	F17	24	86	yes
CM 394	Assignment	Update the schedule of the project and interpret the results				F17	16	100	Yes
Outcome (c)								
CM 216	Assignment	Develop a site layout plan for a construction project				S18	15	87	Yes
CM 233	Project	Prepare and submit competitive bids				F17	18	22	No
CM 256	Project	Construct a Building Information Model using Revit software	F16	10	100	F17	21	100	Yes
CM 318	Project	Prepare a detailed cost estimate				S18	13	69	No
CM 394	Project	Create a baseline schedule for a project	F16	11	90.9	F17	19	100	Yes
CM 412	Final Exam	Calculate heating and/or cooling loads	S17	14	79	S18	15	67	No
CM 448	Final Exam	Analyze and design shallow and/or deep foundations				F17	12	50	No
CM 450	Assignment	Develop Project Scope using drawings and specifications	S17	6	100	S18	21	100	Yes
Outcome (d	l)								
CM 150	Quiz	Describe roles and responsibilities of different personnel				F17	21	71	No
CM 160	Assignment	Concepts, roles and responsibilities of different personnel				S18	17	71	No
CM 224	Project	Prepare a topo survey as a team effort	F16	34	75	F17	24	71	No
CM 401			S17	9	100	S18	12	80	Yes

Summary of Construction Management Direct Courses Assessments

Outcome (e	2)									
CM 190	Report	Locate construction material	S17	13	76	S18	13	76	No	
CM 318	Assignment	Create a cost estimate using RS Means				S18	12	8	No	
CM 331	Assignment	Determine the load on columns using load tracing	S17	15	40	S18	14	50	No	
CM 394	Assignment	Analyze project activities and durations				F17	16	100	Yes	
CM 412	Lab	Determine dew point temp., relative humidity & humidity ratio	S17	21	72	S18	15	93	Yes	
CM 438	Assignment	Identify role of OSHA in jobsite accident and injury prevention				S18	18	63	No	
CM 448	Test	Analyze and calculate the vertical stress increment in soils				F17	13	100	Yes	
Outcome (f	Outcome (f)									
CM 150	Quiz	Discuss ethics in business environment				F17	22	82	Yes	
CM 160	Term Paper	Write a paper on ethics in construction				S18	9	44	No	
CM 214	Case Study	Prepare a paper on ethics in industry	F16	44	51	F17	23	48	No	
CM 331	Assignment	Ethics in Construction and general enterprise				S18	13	70	No	
CM 438	Assignment	identify various risks associated with construction operations				S18	18	60	No	
Outcome (g	<u>(</u>)									
CM 160	Presentation	Prepare and present project outcomes				S18	13	85	Yes	
CM 214	Case Study	Case study involving ethical situation	F16	44	47	F17	23	61	No	
CM 216	Term Paper	Write a technical report on equipment				S18	15	87	Yes	
CM 224	Project	Prepare a topographic map	F16	5	70	F17	19	48	No	
CM 318	Presentation	Prepare and present project outcomes				S18	13	23	No	
CM 400	Presentation	Prepare and present project outcomes				F17	10	10	No	
CM 401	Presentation	Prepare and present project outcomes	S17	9	89	S18	10	60	No	
Outcome (h	ı)									
CM 460	Assignment	Define and explain the sustainable construction roadmap	S17	19	100	S18	25	100	Yes	
Outcome (i))									
CM 190	Final exam	Advancement in construction material	S17	21	85	S18	13	84	Yes	
CM 318	Assignment	Ability to adjust estimates using location indices				S18	12	58	No	
CM 450	Term Paper	Write a paper on a construction topic	S17	8	100	S18	22	100	Yes	
Outcome (j)									
CM 160	Assignment	Use of the Architect's scale				S18	13	85	Yes	
CM 233	Quiz	Utilize pricing techniques and price databases (R.S. Means)				F17	17	88	Yes	
CM 256	Assignment	Understand BIM integration for different delivery methods	F16	10	100	F17	21	100	Yes	
CM 318	Assignment	Prepare a cost estimate using Microsoft Excel				S18	12	100	Yes	

CM 320	Test	Use an OSHA standard manual				F17	19	94	Yes
CM 438	Test	Understanding of methods of payment for work done				S18	18	82	Yes
CM 450	Assignment	Recommend a project delivery method	S17	6	100	S18	23	100	Yes
CM 460	Assignment	Develop basic understanding of LEED AP programs	S17	19	100	S18	25	100	Yes
Outcome (k)									
CM 150	Test	Read and interpret construction documents				F17	17	47	No
CM 160	Final exam	Read and interpret construction drawings				S18	17	24	No
CM 216	Quiz	Provide IBC occupancy classifications for building projects				S18	18	89	Yes
CM 233	Quiz	Describe different types of construction project estimates				F17	18	89	Yes
CM 256	Assignment	Define and explain BIM and the difference between CAD	F16	10	100	F17	21	100	Yes
CM 320	Assignment	Identify the applicable construction OSHA standards				F17	19	89	Yes
CM 331	Assignment	Retaining structure overturning and sliding stability	S17	17	83	S18	15	82	Yes
CM 394	Assignment	Create a construction schedule using a software				F17	19	100	Yes
CM 412	Assignment	Select appropriate material of construction for HVAC system	S17	18	83	S18	21	90	Yes
CM 450	Assignment	Present the pros and cons of different forms of organizations	S17	6	100	S18	23	100	Yes
CM 460	Assignment	Understand USGBC LEED certification process	S17	19	100	S18	25	100	Yes