

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
Factor 1: Instruction & Interaction in Major Courses	26	4.54	0.87	5.44	5.25	3.79	4.79	4.74		3.79	5.44	4.79	1.06	-0.25	▼	5
Q13. Instruction and Faculty in your Engineering Major Quality of: Teaching	26	5.00	0.73	5.62	5.52	3.73	5.10	5.11		3.73	5.62	5.07	1.20	-0.07	▼	5
Q14. Instruction and Faculty in your Engineering Major Quality of: Feedback on assignments (other than grades)	26	4.00	1.04	4.90	4.70	3.41	4.36	4.51		3.41	4.90	4.42	1.26	-0.42	▼	5
Q15. Instruction and Faculty in your Engineering Major Quality of: Student/faculty interaction	26	4.62	1.18	5.81	5.52	4.23	4.86	4.61		4.23	5.81	4.87	1.42	-0.25	▼	4
Factor 2: Aspects of Major Courses	26	5.14	0.73	5.89	5.60	4.90	5.17	5.17		4.90	5.89	5.27	1.03	-0.13	▼	5
Q20. Satisfaction with: Grades in major courses accurately reflecting students' level of performance	26	4.88	1.40	5.67	4.78	4.68	4.71	5.07		4.68	5.67	4.96	1.67	-0.08	▼	3
Q21. Satisfaction with: Accessibility of major course instructors outside of class	26	5.50	0.97	6.19	5.96	4.45	5.58	5.44		4.45	6.19	5.51	1.38	-0.01	▼	4
Q22. Satisfaction with: Responsiveness to major course instructors to student concerns	26	5.23	1.01	5.57	5.62	4.27	5.23	5.50		4.27	5.62	5.33	1.35	-0.10	▼	4
Q23. Satisfaction with: Amount of work required of in major courses	26	3.85	1.63	5.43	5.11	4.50	4.71	4.60		3.85	5.43	4.76	1.51	-0.91	▼	6
Q30. Satisfaction with: Average size of major courses	26	5.50	1.05	6.52	6.37	6.27	5.21	5.22		5.21	6.52	5.60	1.32	-0.10	▼	4
Q31. Satisfaction with: Availability of courses in major	26	5.88	1.01	5.95	5.81	5.24	5.60	5.20		5.20	5.95	5.46	1.52	0.42	▲	2
Factor 3: Breadth of Curriculum	26	4.43	0.97	5.21	4.81	4.13	4.64	4.92	4.85	4.13	5.21	4.79	1.11	-0.36	▼	6
Q24. Satisfaction with: Engineering curriculum instructors presentation of technology issues	26	4.65	1.04	5.35	5.33	4.19	5.08	5.15	5.31	4.19	5.35	5.09	1.22	-0.44	▼	6
Q25. Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	26	4.58	1.34	5.14	4.44	4.32	4.51	4.85	4.92	4.32	5.14	4.70	1.51	-0.12	▼	4
Q26. Satisfaction with: Opportunities for interaction with practitioners	24	3.88	1.20	4.86	4.44	3.62	4.14	4.59	4.46	3.62	4.86	4.39	1.44	-0.51	▼	6
Q33. Satisfaction with: Amount of work in relationship to what was learned	26	4.54	1.45	5.52	5.00	4.32	4.83	5.05	4.67	4.32	5.52	4.94	1.43	-0.40	▼	6
Factor 4: Team & Extracurricular Activities	26	5.36	0.97	5.95	5.13	5.11	4.88	5.38	5.08	4.88	5.95	5.25	1.12	0.11	▲	3
Q27. Satisfaction with: Value derived from team experiences	26	5.35	0.78	6.14	5.73	5.09	5.69	5.64	5.46	5.09	6.14	5.64	1.31	-0.29	▼	6
Q28. Satisfaction with: Value of Engineering program student organization activities	22	5.27	1.29	5.86	4.78	5.05	4.25	5.19	4.92	4.25	5.86	4.98	1.42	0.29	▲	2
Q29. Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	23	5.35	1.31	5.86	4.93	5.33	4.35	5.23	4.75	4.35	5.86	5.05	1.44	0.30	▲	2

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
Factor 5: Computing Resources	26	5.65	1.00	5.62	4.19	4.64	5.53	5.47	5.62	4.19	5.65	5.27	1.59	0.38	▲	1
Q36. Advising/Computing - Advising/Computing - Satisfaction with: Quality of computing resources	26	5.65	1.00	5.62	4.19	4.64	5.53	5.47	5.62	4.19	5.65	5.27	1.59	0.38	▲	1
Factor 6: Fellow Students	26	5.35	0.87	6.02	5.72	5.32	5.54	5.51		5.32	6.02	5.57	1.11	-0.22	▼	5
Q37. Classmates - Satisfaction with characteristics of your fellow students': Academic quality	26	5.23	1.25	6.00	6.19	5.41	5.71	5.52		5.23	6.19	5.69	1.28	-0.46	▼	6
Q38. Classmates - Satisfaction with characteristics of your fellow students': Ability to work in teams	26	5.35	0.87	5.90	5.00	5.14	5.51	5.57		5.00	5.90	5.47	1.34	-0.12	▼	4
Q39. Classmates - Satisfaction with characteristics of your fellow students': Level of camaraderie	26	5.46	0.89	6.14	5.96	5.41	5.39	5.44		5.39	6.14	5.56	1.47	-0.10	▼	3
Factor 7: Career Services and Job Placement	24	4.90	0.88	5.41	4.16	4.23	4.60	5.44		4.16	5.44	4.94	1.34	-0.04	▼	3
Q40. Career Services - Career Services - Satisfaction with: Assistance in preparation for permanent job search	23	5.30	1.33	5.67	4.15	4.61	4.48	5.48		4.15	5.67	4.99	1.71	0.31	▲	3
Q41. Career Services - Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	22	4.86	1.06	5.05	3.60	3.74	3.94	5.10		3.60	5.10	4.48	1.69	0.38	▲	3
Q42. Career Services - Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	18	4.17	0.90	5.00	3.44	4.00	4.81	4.67		3.44	5.00	4.51	1.66	-0.34	▼	4
Q43. Career Services - Career Services - Satisfaction with: Number of companies recruiting on campus	24	4.71	1.31	5.21	3.81	3.80	4.43	5.76		3.80	5.76	4.93	1.69	-0.22	▼	3
Q44. Career Services - Career Services - Satisfaction with: Quality of companies recruiting on campus	24	5.38	0.99	5.74	5.19	5.00	5.32	5.98		5.00	5.98	5.59	1.39	-0.21	▼	3

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
Factor 8: System Design & Problem Solving	26	5.57	0.74	5.68	5.80	5.25	5.70	5.89	6.15	5.25	6.15	5.77	0.84	-0.20	▼	6
Q48. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design experiments	26	5.00	1.27	5.38	5.41	4.82	5.62	5.81	6.15	4.82	6.15	5.60	1.13	-0.60	▼	6
Q49. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	26	5.77	0.75	5.86	5.96	5.41	5.60	5.94	5.92	5.41	5.96	5.80	1.09	-0.03	▼	5
Q50. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	25	6.28	0.78	5.90	6.37	5.68	5.98	6.22	6.15	5.68	6.37	6.10	0.85	0.18	▲	2
Q51. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design a system, component, or process to meet desired needs	26	5.38	1.04	6.00	5.81	5.14	5.77	5.80	6.38	5.14	6.38	5.78	1.02	-0.40	▼	6
Q52. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Function on multidisciplinary teams	26	5.46	1.05	5.24	5.44	5.24	5.53	5.69	6.15	5.24	6.15	5.56	1.45	-0.10	▼	4
Factor 9: Impact of Engineering Solutions	26	4.90	0.96	5.50	5.76	4.75	4.98	5.81	5.77	4.75	5.81	5.47	1.13	-0.57	▼	6
Q56. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	26	5.00	1.18	5.86	5.63	4.86	4.87	6.16	5.69	4.86	6.16	5.61	1.41	-0.61	▼	5
Q69. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: A global/societal context	26	4.81	1.07	5.14	5.89	4.64	5.10	5.47	5.85	4.64	5.89	5.34	1.27	-0.53	▼	6

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
Factor 10: Use of Tools and Text	26	5.18	0.76	5.74	5.66	4.50	5.23	5.74	6.12	4.50	6.12	5.51	0.93	-0.33	▼	6
Q58. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	25	5.12	1.18	5.90	5.81	4.36	5.48	5.98	6.17	4.36	6.17	5.68	1.26	-0.56	▼	6
Q59. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	26	5.69	0.87	6.19	6.19	5.00	5.60	6.17	6.50	5.00	6.50	5.94	1.08	-0.25	▼	5
Q62. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools specific to your primary academic major	26	5.46	1.08	5.71	5.59	4.38	5.48	5.82	6.00	4.38	6.00	5.58	1.20	-0.12	▼	6
Q67. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	23	4.22	1.44	4.85	4.85	3.50	4.02	5.08	5.58	3.50	5.58	4.65	1.58	-0.43	▼	5
Q68. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	24	5.17	0.90	6.00	5.85	5.18	5.47	5.63	6.50	5.17	6.50	5.66	1.15	-0.49	▼	7

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
Factor 11: Apply Knowledge and Identify Problems	26	5.72	0.67	5.84	6.00	5.34	5.82	6.09	6.24	5.34	6.24	5.93	0.73	-0.21	▼	6
Q45. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	26	5.85	1.03	5.86	6.19	5.95	5.71	6.26	6.54	5.71	6.54	6.07	0.89	-0.22	▼	6
Q46. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	26	5.69	0.91	5.81	6.04	5.68	5.77	6.24	6.38	5.68	6.38	6.01	0.87	-0.32	▼	6
Q47. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	26	6.12	0.89	6.29	6.07	5.91	6.12	6.31	6.31	5.91	6.31	6.19	0.79	-0.07	▼	4
Q53. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	26	5.73	0.81	6.05	6.19	5.18	6.08	6.02	6.15	5.18	6.19	5.98	1.01	-0.25	▼	6
Q54. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	26	5.46	0.84	5.67	5.74	4.77	5.88	5.88	6.15	4.77	6.15	5.75	1.09	-0.29	▼	6
Q55. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	26	6.12	0.80	5.90	6.26	5.41	5.90	6.14	6.31	5.41	6.31	6.01	0.90	0.11	▲	4
Q61. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	26	5.08	1.00	5.33	5.52	4.45	5.29	5.77	5.85	4.45	5.85	5.46	1.35	-0.38	▼	6
Factor 12: Design Experience Built On Coursework	26	5.60	0.71	5.62	5.86	4.97	5.54	5.91		4.97	5.91	5.68	0.90	-0.08	▼	4
Q64. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on knowledge from previous course work	26	5.77	0.93	5.81	6.11	5.14	5.58	6.04		5.14	6.11	5.81	0.99	-0.04	▼	4
Q65. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on skills from previous course work	26	5.81	0.88	5.90	6.00	5.09	5.67	5.94		5.09	6.00	5.79	1.01	0.02	▲	4
Q66. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Incorporated engineering standards	26	5.23	0.85	5.14	5.48	4.68	5.37	5.77		4.68	5.77	5.45	1.13	-0.22	▼	4

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
Factor 13: Design Experience Issues	26	4.83	0.82	5.40	5.19	4.33	4.84	5.53	6.05	4.33	6.05	5.23	1.03	-0.40	▼	6
Q72. System Design - To what degree did your system design experience address the following: Addressed Economic issues	25	5.52	1.10	6.05	6.04	5.52	5.63	5.83	6.15	5.52	6.15	5.82	1.15	-0.30	▼	6
Q73. System Design - To what degree did your system design experience address the following: Addressed Environmental issues	26	5.50	1.01	5.81	5.33	4.90	5.06	5.99	6.23	4.90	6.23	5.58	1.26	-0.08	▼	4
Q74. System Design - To what degree did your system design experience address the following: Addressed Social issues	26	4.15	1.06	4.57	4.07	3.86	4.20	4.79		3.86	4.79	4.43	1.49	-0.28	▼	4
Q75. System Design - To what degree did your system design experience address the following: Addressed Political issues	25	3.32	1.26	4.19	3.63	3.00	3.61	4.57		3.00	4.57	4.01	1.68	-0.69	▼	5
Q76. System Design - To what degree did your system design experience address the following: Addressed Ethical issues	25	4.64	1.13	5.24	5.48	4.86	4.52	5.62	5.69	4.52	5.69	5.24	1.44	-0.60	▼	6
Q77. System Design - To what degree did your system design experience address the following: Addressed Health and Safety issues	26	5.27	0.90	6.24	6.04	4.52	5.15	6.12	6.08	4.52	6.24	5.74	1.25	-0.47	▼	5
Q78. System Design - To what degree did your system design experience address the following: Addressed Manufacturability issues	25	5.04	1.40	5.48	5.74	4.10	5.37	5.79	6.23	4.10	6.23	5.52	1.40	-0.48	▼	6
Q79. System Design - To what degree did your system design experience address the following: Addressed Sustainability issues	25	5.04	1.25	5.67	5.15	3.86	5.10	5.53	5.92	3.86	5.92	5.26	1.43	-0.22	▼	6
Factor 14: Laboratory Facilities	26	5.06	1.09	5.88	6.26	4.39	4.80	5.30		4.39	6.26	5.27	1.40	-0.21	▼	4
Q80. Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Established an atmosphere conducive to learning	26	5.08	1.11	5.86	6.26	4.41	4.58	5.49		4.41	6.26	5.29	1.53	-0.21	▼	4
Q81. Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	26	5.04	1.22	5.90	6.26	4.36	5.04	5.13		4.36	6.26	5.25	1.49	-0.21	▼	4

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
Factor 15: Overall Program Effectiveness	26	5.40	1.16	5.99	4.87	4.05	4.61	5.45	5.15	4.05	5.99	5.08	1.38	0.32	▲	3
Q83. The Bottom Line - Overall Satisfaction - Extent that the Undergraduate Engineering program experience fulfill expectations	26	5.54	1.08	5.86	5.11	3.95	4.79	5.20	5.15	3.95	5.86	5.03	1.35	0.51	▲	2
Q84. Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	26	5.19	1.59	5.67	4.74	3.55	4.00	5.28		3.55	5.67	4.75	1.67	0.44	▲	3
Q85. How inclined are you to recommend your: How inclined are you to recommend your Undergraduate Engineering Major to a close friend	25	5.20	1.65	6.19	4.41	4.14	4.71	5.53		4.14	6.19	5.10	1.80	0.10	▲	3
Q86. How inclined are you to recommend your: How inclined are you to recommend your Undergraduate Engineering School to a close friend	26	5.62	1.47	6.24	5.22	4.55	4.92	5.76		4.55	6.24	5.40	1.64	0.22	▲	3

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

	Your Data			Your Select 6 Data										Comparison to Select 6		
				There are 6 institutions in this comparison group.												
	N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means		Wt Mean	Std Dev	Difference in Means	Arrow	Rank Among 7
										Min	Max					
NOTE: These question(s) below do not comprise a study factor.																
Q16. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Calculus	23	4.30	1.94	4.67	5.42	5.28	5.28	5.03		4.30	5.42	5.13	1.65	-0.83	▼	6
Q17. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Differential Equations	26	4.85	1.49	4.14	5.41	5.24	4.22	5.19		4.14	5.41	4.90	1.73	-0.05	▼	4
Q18. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Physics	24	3.42	1.73	3.55	3.81	4.14	4.48	4.58		3.42	4.58	4.28	1.83	-0.86	▼	6
Q19. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Chemistry	26	5.19	1.41	4.81	5.58	5.86	5.55	5.99		4.81	5.99	5.68	1.35	-0.49	▼	5
Q32. Satisfaction with: Quality of Engineering classrooms	26	4.77	1.28	6.29	5.30	4.36	4.73	4.65		4.36	6.29	4.89	1.67	-0.12	▼	3
Q34. Advising/Computing - Advising/Computing - Satisfaction with: Academic advising by faculty	26	4.08	1.62	5.52	5.48	4.27	4.63	5.18	5.23	4.08	5.52	5.04	1.71	-0.96	▼	7
Q35. Advising/Computing - Advising/Computing - Satisfaction with: Academic advising by non-faculty	21	5.05	1.46	5.76	5.00	3.61	4.45	5.71	5.38	3.61	5.76	5.20	1.63	-0.15	▼	4
Q57. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand professional responsibility	26	5.15	1.17	6.14	5.78	5.14	5.33	6.12	5.77	5.14	6.14	5.77	1.27	-0.62	▼	6
Q60. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	26	5.85	0.91	5.90	6.00	5.14	5.06	5.85	6.15	5.06	6.15	5.63	1.41	0.22	▲	5
Q63. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply skills specific to your primary academic major	26	6.00	0.78	6.00	6.04	5.05	5.63	6.14	6.23	5.05	6.23	5.90	0.98	0.10	▲	5
Q70. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: An economic context	26	5.00	1.30	5.95	6.00	5.36	5.18	5.70	6.08	5.00	6.08	5.63	1.20	-0.63	▼	7
Q71. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: An environmental context	26	5.38	1.11	5.76	5.81	4.64	5.16	5.92	6.17	4.64	6.17	5.60	1.22	-0.22	▼	5
Q82. Course Comparison - Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	26	5.77	1.19	6.58	5.15	3.95	4.87	5.30		3.95	6.58	5.14	1.53	0.63	▲	2

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major: Chemical/Molecular

	Your Data			Carnegie Class Data and Comparisons There are 27 institutions in this Carnegie Class.							All Institutions Data and Comparisons There are 70 total participating institutions						
	N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank
						Min	Max						Min	Max			
Factor 1: Instruction & Interaction in Major Courses	26	4.54	0.87	4.73	1.06	3.22	5.33	-0.19	▼	15	4.96	1.10	3.22	6.27	-0.42	▼	31
Q13. Instruction and Faculty in your Engineering Major Quality of: Teaching	26	5.00	0.73	4.92	1.21	2.67	5.61	0.08	▲	11	5.10	1.17	2.67	6.32	-0.10	▼	26
Q14. Instruction and Faculty in your Engineering Major Quality of: Feedback on assignments (other than grades)	26	4.00	1.04	4.31	1.26	2.67	4.96	-0.31	▼	14	4.55	1.27	2.67	6.00	-0.55	▼	32
Q15. Instruction and Faculty in your Engineering Major Quality of: Student/faculty interaction	26	4.62	1.18	4.93	1.39	4.22	5.68	-0.31	▼	16	5.21	1.41	3.75	6.72	-0.59	▼	32
Factor 2: Aspects of Major Courses	26	5.14	0.73	5.34	0.95	4.90	6.13	-0.20	▼	18	5.51	0.91	4.29	6.37	-0.37	▼	35
Q20. Satisfaction with: Grades in major courses accurately reflecting students' level of performance	26	4.88	1.40	4.99	1.60	4.38	5.70	-0.11	▼	16	5.24	1.50	3.00	6.40	-0.36	▼	33
Q21. Satisfaction with: Accessibility of major course instructors outside of class	26	5.50	0.97	5.66	1.27	4.33	6.50	-0.16	▼	15	5.84	1.19	4.33	6.80	-0.34	▼	32
Q22. Satisfaction with: Responsiveness to major course instructors to student concerns	26	5.23	1.01	5.53	1.27	4.27	6.33	-0.30	▼	17	5.65	1.25	4.00	6.60	-0.42	▼	32
Q23. Satisfaction with: Amount of work required of in major courses	26	3.85	1.63	4.78	1.51	3.85	6.40	-0.93	▼	22	5.05	1.43	3.85	6.40	-1.20	▼	41
Q30. Satisfaction with: Average size of major courses	26	5.50	1.05	5.73	1.28	4.68	7.00	-0.23	▼	17	5.87	1.20	4.68	7.00	-0.37	▼	34
Q31. Satisfaction with: Availability of courses in major	26	5.88	1.01	5.37	1.54	3.94	6.10	0.51	▲	2	5.40	1.56	3.94	6.10	0.48	▲	4
Factor 3: Breadth of Curriculum	26	4.43	0.97	4.75	1.09	4.13	5.69	-0.32	▼	16	4.94	1.09	3.56	5.70	-0.51	▼	33
Q24. Satisfaction with: Engineering curriculum instructors presentation of technology issues	26	4.65	1.04	5.07	1.23	4.00	5.71	-0.42	▼	18	5.15	1.22	2.75	5.80	-0.50	▼	36
Q25. Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	26	4.58	1.34	4.60	1.57	3.50	6.25	-0.02	▼	13	4.89	1.55	3.50	6.25	-0.31	▼	28
Q26. Satisfaction with: Opportunities for interaction with practitioners	24	3.88	1.20	4.32	1.51	3.07	5.75	-0.44	▼	19	4.52	1.50	3.07	5.75	-0.64	▼	36
Q33. Satisfaction with: Amount of work in relationship to what was learned	26	4.54	1.45	4.96	1.41	3.67	5.80	-0.42	▼	16	5.18	1.35	3.50	6.40	-0.64	▼	34

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin -Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major: Chemical/Molecular

		Chemical/Molecular									All Institutions Data and Comparisons There are 70 total participating institutions							
		Your Data			Carnegie Class Data and Comparisons There are 27 institutions in this Carnegie Class.													
		N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank
Min	Max	Min	Max															
Factor 4: Team & Extracurricular Activities		26	5.36	0.97	5.19	1.12	4.33	5.78	0.17	▲	9	5.24	1.11	4.30	5.95	0.12	▲	17
Q27.	Satisfaction with: Value derived from team experiences	26	5.35	0.78	5.53	1.34	4.55	6.25	-0.18	▼	18	5.59	1.33	2.67	6.44	-0.24	▼	32
Q28.	Satisfaction with: Value of Engineering program student organization activities	22	5.27	1.29	4.97	1.37	4.17	5.71	0.30	▲	6	5.02	1.37	4.00	5.95	0.25	▲	11
Q29.	Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	23	5.35	1.31	5.04	1.41	4.18	5.73	0.31	▲	7	5.12	1.38	3.70	6.11	0.23	▲	14
Factor 5: Computing Resources		26	5.65	1.00	5.43	1.49	4.19	6.03	0.22	▲	8	5.39	1.48	3.75	6.06	0.26	▲	14
Q36.	Advising/Computing - Advising/Computing - Satisfaction with: Quality of computing resources	26	5.65	1.00	5.43	1.49	4.19	6.03	0.22	▲	8	5.39	1.48	3.75	6.06	0.26	▲	14
Factor 6: Fellow Students		26	5.35	0.87	5.71	1.06	5.25	6.47	-0.36	▼	20	5.72	1.08	5.15	6.47	-0.37	▼	36
Q37.	Classmates - Satisfaction with characteristics of your fellow students': Academic quality	26	5.23	1.25	5.80	1.19	5.23	6.56	-0.57	▼	22	5.76	1.17	5.16	6.56	-0.53	▼	40
Q38.	Classmates - Satisfaction with characteristics of your fellow students': Ability to work in teams	26	5.35	0.87	5.56	1.29	4.75	6.23	-0.21	▼	16	5.57	1.33	4.75	6.23	-0.22	▼	31
Q39.	Classmates - Satisfaction with characteristics of your fellow students': Level of camaraderie	26	5.46	0.89	5.78	1.39	5.08	6.78	-0.32	▼	17	5.82	1.34	5.07	6.78	-0.36	▼	34
Factor 7: Career Services and Job Placement		24	4.90	0.88	4.58	1.51	2.82	5.44	0.32	▲	7	4.63	1.52	2.07	5.46	0.27	▲	14
Q40.	Career Services - Career Services - Satisfaction with: Assistance in preparation for permanent job search	23	5.30	1.33	4.71	1.77	3.07	5.76	0.59	▲	3	4.81	1.77	2.36	5.76	0.49	▲	10
Q41.	Career Services - Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	22	4.86	1.06	4.19	1.83	2.40	5.18	0.67	▲	4	4.38	1.82	1.82	5.68	0.48	▲	11
Q42.	Career Services - Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	18	4.17	0.90	4.29	1.72	2.33	5.50	-0.12	▼	11	4.31	1.72	1.91	5.50	-0.14	▼	22
Q43.	Career Services - Career Services - Satisfaction with: Number of companies recruiting on campus	24	4.71	1.31	4.51	1.88	2.33	5.76	0.20	▲	7	4.52	1.87	1.75	5.76	0.19	▲	17
Q44.	Career Services - Career Services - Satisfaction with: Quality of companies recruiting on campus	24	5.38	0.99	5.12	1.69	2.67	6.09	0.26	▲	6	5.04	1.73	2.18	6.09	0.34	▲	12

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin -Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major:

Chemical/Molecular

Chemical/Molecular																		
Your Data			Carnegie Class Data and Comparisons								All Institutions Data and Comparisons							
			There are 27 institutions in this Carnegie Class.								There are 70 total participating iinstitutions							
N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank		
					Min	Max						Min	Max					
26	5.57	0.74	5.66	0.92	4.24	6.15	-0.09	▼	14	5.73	0.92	4.24	6.19	-0.16	▼	28		
26	5.00	1.27	5.52	1.15	4.00	6.15	-0.52	▼	19	5.63	1.16	4.00	6.32	-0.63	▼	37		
26	5.77	0.75	5.73	1.14	4.50	6.25	0.04	▲	11	5.79	1.12	4.50	6.60	-0.02	▼	21		
25	6.28	0.78	6.07	0.91	4.80	6.37	0.21	▲	3	6.11	0.94	4.80	6.80	0.17	▲	8		
26	5.38	1.04	5.68	1.14	3.67	6.38	-0.30	▼	19	5.78	1.13	3.67	6.38	-0.40	▼	37		
26	5.46	1.05	5.28	1.60	3.57	6.75	0.18	▲	10	5.36	1.57	2.75	6.75	0.10	▲	20		
26	4.90	0.96	5.33	1.21	4.00	5.81	-0.43	▼	17	5.44	1.15	4.00	6.29	-0.54	▼	35		
26	5.00	1.18	5.50	1.45	3.67	6.16	-0.50	▼	16	5.62	1.37	3.67	6.58	-0.62	▼	33		
26	4.81	1.07	5.17	1.36	4.33	5.89	-0.36	▼	15	5.26	1.31	4.33	6.00	-0.45	▼	32		

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin -Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major:

Chemical/Molecular

		Chemical/Molecular									All Institutions Data and Comparisons There are 70 total participating institutions							
		Your Data			Carnegie Class Data and Comparisons There are 27 institutions in this Carnegie Class.													
		N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank
							Min	Max						Min	Max			
Factor 10: Use of Tools and Text		26	5.18	0.76	5.39	0.99	4.38	6.12	-0.21	▼	17	5.48	0.96	4.38	6.12	-0.30	▼	34
Q58.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	25	5.12	1.18	5.61	1.31	3.93	6.50	-0.49	▼	20	5.67	1.26	3.93	6.60	-0.55	▼	38
Q59.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	26	5.69	0.87	5.84	1.12	4.67	6.75	-0.15	▼	15	5.83	1.15	4.67	6.75	-0.14	▼	24
Q62.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools specific to your primary academic major	26	5.46	1.08	5.50	1.29	3.30	6.00	-0.04	▼	15	5.56	1.27	3.25	6.25	-0.10	▼	28
Q67.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	23	4.22	1.44	4.38	1.65	2.70	5.67	-0.16	▼	12	4.60	1.62	2.70	5.67	-0.38	▼	28
Q68.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	24	5.17	0.90	5.57	1.19	4.00	6.50	-0.40	▼	20	5.68	1.15	4.00	6.50	-0.51	▼	38

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin-Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major:

Chemical/Molecular

	Your Data			Carnegie Class Data and Comparisons There are 27 institutions in this Carnegie Class.							All Institutions Data and Comparisons There are 70 total participating institutions						
	N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank
						Min	Max						Min	Max			
Factor 11: Apply Knowledge and Identify Problems	26	5.72	0.67	5.86	0.79	4.24	6.24	-0.14	▼	16	5.90	0.79	4.24	6.34	-0.18	▼	31
Q45. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	26	5.85	1.03	6.02	1.00	4.00	6.54	-0.17	▼	14	6.02	0.96	4.00	6.80	-0.17	▼	28
Q46. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	26	5.69	0.91	6.04	0.91	5.00	6.38	-0.35	▼	19	6.05	0.90	5.00	6.60	-0.36	▼	36
Q47. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	26	6.12	0.89	6.22	0.84	4.00	6.54	-0.10	▼	15	6.26	0.84	4.00	6.80	-0.14	▼	29
Q53. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	26	5.73	0.81	5.85	1.05	4.67	6.50	-0.12	▼	14	5.89	1.04	4.67	6.50	-0.16	▼	28
Q54. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	26	5.46	0.84	5.63	1.15	4.33	6.25	-0.17	▼	16	5.68	1.13	4.33	6.25	-0.22	▼	31
Q55. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	26	6.12	0.80	5.98	0.99	4.00	6.50	0.14	▲	7	6.05	0.97	4.00	6.61	0.07	▲	18
Q61. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	26	5.08	1.00	5.28	1.37	3.67	5.85	-0.20	▼	15	5.38	1.30	3.67	6.29	-0.30	▼	31
Factor 12: Design Experience Built On Coursework	26	5.60	0.71	5.68	0.95	4.22	6.00	-0.08	▼	14	5.77	0.93	4.22	6.32	-0.17	▼	30
Q64. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on knowledge from previous course work	26	5.77	0.93	5.86	1.02	4.67	6.32	-0.09	▼	13	5.92	1.00	4.67	6.33	-0.15	▼	28
Q65. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on skills from previous course work	26	5.81	0.88	5.82	1.03	4.33	6.16	-0.01	▼	12	5.90	1.00	4.33	6.40	-0.09	▼	27
Q66. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Incorporated engineering standards	26	5.23	0.85	5.37	1.21	3.67	5.84	-0.14	▼	15	5.50	1.17	3.67	6.38	-0.27	▼	31

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin-Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major:

Chemical/Molecular

	Your Data			Carnegie Class Data and Comparisons There are 27 institutions in this Carnegie Class.							All Institutions Data and Comparisons There are 70 total participating institutions						
	N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank
						Min	Max						Min	Max			
Factor 13: Design Experience Issues	26	4.83	0.82	5.02	1.11	4.00	6.05	-0.19	▼	14	5.13	1.08	4.00	6.05	-0.30	▼	30
Q72. System Design - To what degree did your system design experience address the following: Addressed Economic issues	25	5.52	1.10	5.65	1.26	4.25	6.20	-0.13	▼	15	5.73	1.21	4.25	6.29	-0.21	▼	30
Q73. System Design - To what degree did your system design experience address the following: Addressed Environmental issues	26	5.50	1.01	5.35	1.37	4.33	6.23	0.15	▲	6	5.38	1.33	4.33	6.23	0.12	▲	14
Q74. System Design - To what degree did your system design experience address the following: Addressed Social issues	26	4.15	1.06	4.37	1.53	3.25	5.21	-0.22	▼	13	4.51	1.50	3.25	5.52	-0.36	▼	29
Q75. System Design - To what degree did your system design experience address the following: Addressed Political issues	25	3.32	1.26	3.87	1.68	2.75	4.78	-0.55	▼	16	4.04	1.63	2.75	5.16	-0.72	▼	33
Q76. System Design - To what degree did your system design experience address the following: Addressed Ethical issues	25	4.64	1.13	4.90	1.56	3.67	5.69	-0.26	▼	14	5.06	1.51	3.67	6.54	-0.42	▼	31
Q77. System Design - To what degree did your system design experience address the following: Addressed Health and Safety issues	26	5.27	0.90	5.57	1.28	4.00	6.12	-0.30	▼	17	5.68	1.25	4.00	6.62	-0.41	▼	32
Q78. System Design - To what degree did your system design experience address the following: Addressed Manufacturability issues	25	5.04	1.40	5.23	1.53	4.00	6.23	-0.19	▼	13	5.37	1.43	4.00	6.23	-0.33	▼	30
Q79. System Design - To what degree did your system design experience address the following: Addressed Sustainability issues	25	5.04	1.25	5.10	1.50	3.86	5.92	-0.06	▼	11	5.22	1.46	3.86	6.28	-0.18	▼	23
Factor 14: Laboratory Facilities	26	5.06	1.09	5.23	1.39	3.93	6.26	-0.17	▼	12	5.40	1.34	3.88	6.30	-0.34	▼	26
Q80. Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Established an atmosphere conducive to learning	26	5.08	1.11	5.23	1.48	3.87	6.26	-0.15	▼	12	5.40	1.43	3.87	6.26	-0.32	▼	26
Q81. Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	26	5.04	1.22	5.24	1.51	4.00	6.26	-0.20	▼	12	5.40	1.45	3.50	6.40	-0.36	▼	28

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin -Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major: Chemical/Molecular

	Your Data			Carnegie Class Data and Comparisons There are 27 institutions in this Carnegie Class.							All Institutions Data and Comparisons There are 70 total participating institutions						
	N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank
						Min	Max						Min	Max			
Factor 15: Overall Program Effectiveness	26	5.40	1.16	5.01	1.31	3.27	5.68	0.39	▲	6	5.16	1.29	2.94	6.14	0.24	▲	15
Q83. The Bottom Line - Overall Satisfaction - Extent that the Undergraduate Engineering program experience fulfill expectations	26	5.54	1.08	4.93	1.38	3.00	5.54	0.61	▲	1	5.11	1.37	3.00	6.20	0.43	▲	7
Q84. Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	26	5.19	1.59	4.79	1.54	2.60	5.75	0.40	▲	7	4.90	1.52	2.60	6.60	0.29	▲	14
Q85. How inclined are you to recommend your: How inclined are you to recommend your Undergraduate Engineering Major to a close friend	25	5.20	1.65	5.03	1.72	3.64	5.95	0.17	▲	9	5.24	1.67	3.64	6.50	-0.04	▼	23
Q86. How inclined are you to recommend your: How inclined are you to recommend your Undergraduate Engineering School to a close friend	26	5.62	1.47	5.29	1.54	3.40	6.47	0.33	▲	7	5.41	1.53	2.00	6.47	0.21	▲	18

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin-Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major:

Chemical/Molecular

Chemical/Molecular																		
Your Data			Carnegie Class Data and Comparisons								All Institutions Data and Comparisons							
			There are 27 institutions in this Carnegie Class.								There are 70 total participating iinstitutions							
N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank		
					Min	Max						Min	Max					
23	4.30	1.94	5.26	1.62	4.00	5.88	-0.96	▼	21	5.24	1.58	3.75	6.35	-0.94	▼	37		
26	4.85	1.49	5.04	1.67	3.71	6.50	-0.19	▼	15	5.17	1.64	3.71	6.50	-0.32	▼	30		
24	3.42	1.73	4.49	1.84	2.46	5.82	-1.07	▼	21	4.50	1.78	2.46	5.82	-1.08	▼	39		
26	5.19	1.41	5.73	1.27	4.64	6.44	-0.54	▼	18	5.54	1.35	4.09	6.75	-0.35	▼	31		
26	4.77	1.28	4.80	1.63	3.18	5.75	-0.03	▼	14	5.11	1.58	3.18	6.80	-0.34	▼	29		
26	4.08	1.62	5.10	1.70	4.00	6.37	-1.02	▼	22	5.26	1.62	3.25	6.48	-1.18	▼	38		
21	5.05	1.46	5.12	1.53	3.61	6.21	-0.07	▼	11	5.12	1.51	3.43	6.21	-0.07	▼	22		
26	5.15	1.17	5.62	1.33	4.27	6.12	-0.47	▼	17	5.73	1.27	4.27	6.50	-0.58	▼	34		
26	5.85	0.91	5.67	1.35	4.60	6.15	0.18	▲	11	5.74	1.30	4.60	6.50	0.11	▲	17		
26	6.00	0.78	5.85	1.04	4.67	6.23	0.15	▲	5	5.90	1.02	4.67	6.42	0.10	▲	15		
26	5.00	1.30	5.54	1.26	4.00	6.08	-0.54	▼	21	5.62	1.22	4.00	6.25	-0.62	▼	40		
26	5.38	1.11	5.47	1.31	4.00	6.17	-0.09	▼	12	5.49	1.28	4.00	6.17	-0.11	▼	22		

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin -Madison's data included

University of Wisconsin-Madison

Factor and Question Analysis: Carnegie Class and All Institution Comparison for Engineering Major:

Chemical/Molecular

Your Data			Carnegie Class Data and Comparisons There are 27 institutions in this Carnegie Class.							All Institutions Data and Comparisons There are 70 total participating institutions						
N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means		Difference in Means	Arrow	Rank
					Min	Max						Min	Max			
26	5.77	1.19	5.04	1.45	2.67	5.79	0.73	▲	2	5.33	1.41	2.50	6.64	0.44	▲	11

Q82. Course Comparison - Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

*NOTE: Weighted Mean and Standard Deviation is calculated with University of Wisconsin -Madison's data included

University of Wisconsin-Madison

ABET Questions: All Comparative Groups for Engineering Major: Chemical/Molecular

Question Means Sorted from Highest Mean to Lowest Mean	Your Data	Select 6 Comparison									Carnegie Class			All Institutions					
		There are 6 institutions in this comparison group.									Mean	Difference	Rank	Mean	Difference	Rank			
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Mean	Difference		Rank	Mean	Difference	Rank	Mean	Difference	Rank		
<u>ABET a: Ability to apply knowledge of mathematics, science and engineering</u>																			
Q47. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	6.12	6.29	6.07	5.91	6.12	6.31	6.31	6.19	-0.07	▼	4	6.22	-0.10	▼	15	6.26	-0.14	▼	29
Q45. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	5.85	5.86	6.19	5.95	5.71	6.26	6.54	6.07	-0.22	▼	6	6.02	-0.17	▼	14	6.02	-0.17	▼	28
Q46. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	5.69	5.81	6.04	5.68	5.77	6.24	6.38	6.01	-0.32	▼	6	6.04	-0.35	▼	19	6.05	-0.36	▼	36
<u>ABET b: Ability to design and conduct experiments, as well as to analyze and interpret data</u>																			
Q50. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	6.28	5.90	6.37	5.68	5.98	6.22	6.15	6.10	0.18	▲	2	6.07	0.21	▲	3	6.11	0.17	▲	8
Q49. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	5.77	5.86	5.96	5.41	5.60	5.94	5.92	5.80	-0.03	▼	5	5.73	0.04	▲	11	5.79	-0.02	▼	21
Q48. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design experiments	5.00	5.38	5.41	4.82	5.62	5.81	6.15	5.60	-0.60	▼	6	5.52	-0.52	▼	19	5.63	-0.63	▼	37

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

NOTE: Carnegie Class and All Institutions Means are weighted are calculated without University of Wisconsin -Madison's data included

NOTE: There are 27 institutions in this Carnegie Class. There are 70 total participating institutions.

University of Wisconsin-Madison

ABET Questions: All Comparative Groups for Engineering Major: Chemical/Molecular

Question Means Sorted from Highest Mean to Lowest Mean	Your Data	Select 6 Comparison									Carnegie Class			All Institutions					
		There are 6 institutions in this comparison group.									Mean	Difference	Rank	Mean	Difference	Rank			
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Mean	Difference	Rank									
<u>ABET c: Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability</u>																			
Q72. System Design - To what degree did your system design experience address the following: Addressed Economic issues	5.52	6.05	6.04	5.52	5.63	5.83	6.15	5.82	-0.30	▼	6	5.65	-0.13	▼	15	5.73	-0.21	▼	30
Q73. System Design - To what degree did your system design experience address the following: Addressed Environmental issues	5.50	5.81	5.33	4.90	5.06	5.99	6.23	5.58	-0.08	▼	4	5.35	0.15	▲	6	5.38	0.12	▲	14
Q51. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design a system, component, or process to meet desired needs	5.38	6.00	5.81	5.14	5.77	5.80	6.38	5.78	-0.40	▼	6	5.68	-0.30	▼	19	5.78	-0.40	▼	37
Q77. System Design - To what degree did your system design experience address the following: Addressed Health and Safety issues	5.27	6.24	6.04	4.52	5.15	6.12	6.08	5.74	-0.47	▼	5	5.57	-0.30	▼	17	5.68	-0.41	▼	32
Q78. System Design - To what degree did your system design experience address the following: Addressed Manufacturability issues	5.04	5.48	5.74	4.10	5.37	5.79	6.23	5.52	-0.48	▼	6	5.23	-0.19	▼	13	5.37	-0.33	▼	30
Q79. System Design - To what degree did your system design experience address the following: Addressed Sustainability issues	5.04	5.67	5.15	3.86	5.10	5.53	5.92	5.26	-0.22	▼	6	5.10	-0.06	▼	11	5.22	-0.18	▼	23
Q76. System Design - To what degree did your system design experience address the following: Addressed Ethical issues	4.64	5.24	5.48	4.86	4.52	5.62	5.69	5.24	-0.60	▼	6	4.90	-0.26	▼	14	5.06	-0.42	▼	31
Q74. System Design - To what degree did your system design experience address the following: Addressed Social issues	4.15	4.57	4.07	3.86	4.20	4.79	0.00	4.43	-0.28	▼	4	4.37	-0.22	▼	13	4.51	-0.36	▼	29
Q75. System Design - To what degree did your system design experience address the following: Addressed Political issues	3.32	4.19	3.63	3.00	3.61	4.57	0.00	4.01	-0.69	▼	5	3.87	-0.55	▼	16	4.04	-0.72	▼	33

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

NOTE: Carnegie Class and All Institutions Means are weighted are calculated without University of Wisconsin -Madison's data included

NOTE: There are 27 institutions in this Carnegie Class. There are 70 total participating institutions.

University of Wisconsin-Madison

ABET Questions: All Comparative Groups for Engineering Major: Chemical/Molecular

Question Means Sorted from Highest Mean to Lowest Mean	Your Data	Select 6 Comparison There are 6 institutions in this comparison group.										Carnegie Class			All Institutions				
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Mean	Difference	Rank	Mean	Difference	Rank	Mean	Difference	Rank			
<u>ABET d: Ability to function on multi-disciplinary teams</u>																			
Q52. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Function on multidisciplinary teams	5.46	5.24	5.44	5.24	5.53	5.69	6.15	5.56	-0.10	▼	4	5.28	0.18	▲	10	5.36	0.10	▲	20
<u>ABET e: Ability to identify, formulate, and solve engineering problems</u>																			
Q55. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	6.12	5.90	6.26	5.41	5.90	6.14	6.31	6.01	0.11	▲	4	5.98	0.14	▲	7	6.05	0.07	▲	18
Q53. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	5.73	6.05	6.19	5.18	6.08	6.02	6.15	5.98	-0.25	▼	6	5.85	-0.12	▼	14	5.89	-0.16	▼	28
Q54. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	5.46	5.67	5.74	4.77	5.88	5.88	6.15	5.75	-0.29	▼	6	5.63	-0.17	▼	16	5.68	-0.22	▼	31
<u>ABET f: Understanding of professional and ethical responsibility</u>																			
Q57. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand professional responsibility	5.15	6.14	5.78	5.14	5.33	6.12	5.77	5.77	-0.62	▼	6	5.62	-0.47	▼	17	5.73	-0.58	▼	34
Q56. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	5.00	5.86	5.63	4.86	4.87	6.16	5.69	5.61	-0.61	▼	5	5.50	-0.50	▼	16	5.62	-0.62	▼	33

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

NOTE: Carnegie Class and All Institutions Means are weighted and calculated without University of Wisconsin-Madison's data included

NOTE: There are 27 institutions in this Carnegie Class. There are 70 total participating institutions.

University of Wisconsin-Madison

ABET Questions: All Comparative Groups for Engineering Major: Chemical/Molecular

Question Means Sorted from Highest Mean to Lowest Mean	Your Data	Select 6 Comparison									Carnegie Class			All Institutions					
		There are 6 institutions in this comparison group.									Mean	Difference	Rank	Mean	Difference	Rank			
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Mean	Difference										
<u>ABET g: Ability to communicate effectively</u>																			
Q59. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	5.69	6.19	6.19	5.00	5.60	6.17	6.50	5.94	-0.25	▼	5	5.84	-0.15	▼	15	5.83	-0.14	▼	24
Q58. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	5.12	5.90	5.81	4.36	5.48	5.98	6.17	5.68	-0.56	▼	6	5.61	-0.49	▼	20	5.67	-0.55	▼	38
<u>ABET h: Broad education necessary to understand the impact of engineering solutions in a global and societal context</u>																			
Q71. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: An environmental context	5.38	5.76	5.81	4.64	5.16	5.92	6.17	5.60	-0.22	▼	5	5.47	-0.09	▼	12	5.49	-0.11	▼	22
Q70. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: An economic context	5.00	5.95	6.00	5.36	5.18	5.70	6.08	5.63	-0.63	▼	7	5.54	-0.54	▼	21	5.62	-0.62	▼	40
Q69. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: A global/societal context	4.81	5.14	5.89	4.64	5.10	5.47	5.85	5.34	-0.53	▼	6	5.17	-0.36	▼	15	5.26	-0.45	▼	32
<u>ABET i: Recognition of the need for, and an ability to engage in, life-long learning</u>																			
Q60. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	5.85	5.90	6.00	5.14	5.06	5.85	6.15	5.63	0.22	▲	5	5.67	0.18	▲	11	5.74	0.11	▲	17
<u>ABET j: Knowledge of contemporary issues</u>																			
Q61. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	5.08	5.33	5.52	4.45	5.29	5.77	5.85	5.46	-0.38	▼	6	5.28	-0.20	▼	15	5.38	-0.30	▼	31

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

NOTE: Carnegie Class and All Institutions Means are weighted are calculated without University of Wisconsin -Madison's data included

NOTE: There are 27 institutions in this Carnegie Class. There are 70 total participating institutions.

Copyright EBI 2016. May Not Be Reproduced Without Permission

University of Wisconsin-Madison

ABET Questions: All Comparative Groups for Engineering Major: Chemical/Molecular

Question Means Sorted from Highest Mean to Lowest Mean	Your Data	Select 6 Comparison There are 6 institutions in this comparison group.									Carnegie Class			All Institutions		
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Mean	Difference	Rank	Mean	Difference	Rank	Mean	Difference	Rank
ABET k: Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice																
Q62. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools specific to your primary academic major	5.46	5.71	5.59	4.38	5.48	5.82	6.00	5.58	-0.12 ▼	6	5.50	-0.04 ▼	15	5.56	-0.10 ▼	28

▼: UW-Madison has a lower mean than the mean of the comparative group ▲: UW-Madison has a higher mean than the mean of the comparative group

NOTE: Carnegie Class and All Institutions Means are weighted are calculated without University of Wisconsin -Madison's data included

NOTE: There are 27 institutions in this Carnegie Class. There are 70 total participating institutions.

University of Wisconsin-Madison

Highest and Lowest Mean Questions for Engineering Major: Chemical/Molecular

This set of questions are the highest mean questions for University of Wisconsin-Madison		# Responses	Mean	Std Dev
Q50.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	25	6.28	0.78
Q47.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	26	6.12	0.89
Q55.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	26	6.12	0.80
Q31.	Satisfaction with: Availability of courses in major	26	5.88	1.01
Q45.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	26	5.85	1.03
Q60.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	26	5.85	0.91
Q65.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on skills from previous course work	26	5.81	0.88
Q64.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on knowledge from previous course work	26	5.77	0.93
Q82.	Course Comparison - Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	26	5.77	1.19
Q49.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	26	5.77	0.75
Q53.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	26	5.73	0.81
Q46.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	26	5.69	0.91
Q59.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	26	5.69	0.87
Q36.	Advising/Computing - Advising/Computing - Satisfaction with: Quality of computing resources	26	5.65	1.00
Q86.	How inclined are you to recommend your: How inclined are you to recommend your Undergraduate Engineering School to a close friend	26	5.62	1.47
This set of questions are the lowest mean questions for University of Wisconsin-Madison		# Responses	Mean	Std Dev
Q75.	System Design - To what degree did your system design experience address the following: Addressed Political issues	25	3.32	1.26
Q18.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Physics	24	3.42	1.73
Q23.	Satisfaction with: Amount of work required of in major courses	26	3.85	1.63
Q26.	Satisfaction with: Opportunities for interaction with practitioners	24	3.88	1.20
Q14.	Instruction and Faculty in your Engineering Major	26	4.00	1.04
Q34.	Advising/Computing - Advising/Computing - Satisfaction with: Academic advising by faculty	26	4.08	1.62
Q74.	System Design - To what degree did your system design experience address the following: Addressed Social issues	26	4.15	1.06
Q42.	Career Services - Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	18	4.17	0.90
Q67.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	23	4.22	1.44
Q16.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Calculus	23	4.30	1.94
Q33.	Satisfaction with: Amount of work in relationship to what was learned	26	4.54	1.45
Q25.	Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	26	4.58	1.34
Q15.	Instruction and Faculty in your Engineering Major	26	4.62	1.18
Q76.	System Design - To what degree did your system design experience address the following: Addressed Ethical issues	25	4.64	1.13
Q24.	Satisfaction with: Engineering curriculum instructors presentation of technology issues	26	4.65	1.04

University of Wisconsin-Madison

Question Competitive Analysis: Select 6 Comparison for Engineering Major: Chemical/Molecular

Greatest Positive Difference Between Your Data and Your Select 6		UW-Madison	Select 6	Difference
Q82.	Course Comparison - Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	5.77	5.14	0.63
Q83.	The Bottom Line - Overall Satisfaction - Extent that the Undergraduate Engineering program experience fulfill expectations	5.54	5.03	0.51
Q84.	Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	5.19	4.75	0.44
Q31.	Satisfaction with: Availability of courses in major	5.88	5.46	0.42
Q36.	Advising/Computing - Advising/Computing - Satisfaction with: Quality of computing resources	5.65	5.27	0.38
Q41.	Career Services - Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	4.86	4.48	0.38
Q40.	Career Services - Career Services - Satisfaction with: Assistance in preparation for permanent job search	5.30	4.99	0.31
Q29.	Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	5.35	5.05	0.30
Q28.	Satisfaction with: Value of Engineering program student organization activities	5.27	4.98	0.29
Q86.	How inclined are you to recommend your: How inclined are you to recommend your Undergraduate Engineering School to a close friend	5.62	5.40	0.22
Q60.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	5.85	5.63	0.22
Q50.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	6.28	6.10	0.18
Q55.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	6.12	6.01	0.11
Q85.	How inclined are you to recommend your: How inclined are you to recommend your Undergraduate Engineering Major to a close friend	5.20	5.10	0.10
Q65.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on skills from previous course work	5.81	5.79	0.02
Greatest Negative Difference Between Your Data and Your Select 6		UW-Madison	Select 6	Difference
Q34.	Advising/Computing - Advising/Computing - Satisfaction with: Academic advising by faculty	4.08	5.04	-0.96
Q23.	Satisfaction with: Amount of work required of in major courses	3.85	4.76	-0.91
Q18.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Physics	3.42	4.28	-0.86
Q16.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Calculus	4.30	5.13	-0.83
Q75.	System Design - To what degree did your system design experience address the following: Addressed Political issues	3.32	4.01	-0.69
Q56.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	5.00	5.61	-0.61
Q48.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design experiments	5.00	5.60	-0.60
Q76.	System Design - To what degree did your system design experience address the following: Addressed Ethical issues	4.64	5.24	-0.60
Q58.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	5.12	5.68	-0.56
Q69.	To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: A global/societal context	4.81	5.34	-0.53
Q26.	Satisfaction with: Opportunities for interaction with practitioners	3.88	4.39	-0.51
Q68.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	5.17	5.66	-0.49
Q19.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Chemistry	5.19	5.68	-0.49
Q78.	System Design - To what degree did your system design experience address the following: Addressed Manufacturability issues	5.04	5.52	-0.48
Q77.	System Design - To what degree did your system design experience address the following: Addressed Health and Safety issues	5.27	5.74	-0.47

NOTE: If a section is blank, this means that there were no questions that met those conditions.

University of Wisconsin-Madison

Question Competitive Analysis: Longitudinal Comparison for Engineering Major: Chemical/Molecular

Greatest Positive Difference Between This Year's Question Means and Last Year's Question Means		2010	2009	Difference
Q73.	System Design - To what degree did your system design experience address the following: Addressed Environmental issues	5.50	4.58	0.92
Q76.	System Design - To what degree did your system design experience address the following: Addressed Ethical issues	4.64	3.96	0.68
Q28.	Satisfaction with: Value of Engineering program student organization activities	5.27	4.73	0.54
Q17.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Differential Equations	4.85	4.38	0.47
Q77.	System Design - To what degree did your system design experience address the following: Addressed Health and Safety issues	5.27	4.83	0.44
Q74.	System Design - To what degree did your system design experience address the following: Addressed Social issues	4.15	3.75	0.40
Q82.	Course Comparison - Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	5.77	5.42	0.35
Q29.	Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	5.35	5.03	0.32
Q83.	The Bottom Line - Overall Satisfaction - Extent that the Undergraduate Engineering program experience fulfill expectations	5.54	5.25	0.29
Q15.	Instruction and Faculty in your Engineering Major Quality of: Student/faculty interaction	4.62	4.34	0.28
Q35.	Advising/Computing - Advising/Computing - Satisfaction with: Academic advising by non-faculty	5.05	4.81	0.24
Q56.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	5.00	4.77	0.23
Q60.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	5.85	5.67	0.18
Q66.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Incorporated engineering standards	5.23	5.06	0.17
Q14.	Instruction and Faculty in your Engineering Major Quality of: Feedback on assignments (other than grades)	4.00	3.85	0.15

Greatest Negative Difference Between This Year's Question Means and Last Year's Question Means		2010	2009	Difference
Q43.	Career Services - Career Services - Satisfaction with: Number of companies recruiting on campus	4.71	5.57	-0.86
Q37.	Classmates - Satisfaction with characteristics of your fellow students': Academic quality	5.23	5.88	-0.65
Q18.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Physics	3.42	4.00	-0.58
Q16.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Calculus	4.30	4.86	-0.56
Q19.	Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Chemistry	5.19	5.72	-0.53
Q80.	Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Established an atmosphere conducive to learning	5.08	5.56	-0.48
Q81.	Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	5.04	5.50	-0.46
Q68.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	5.17	5.62	-0.45
Q30.	Satisfaction with: Average size of major courses	5.50	5.94	-0.44
Q69.	To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: A global/societal context	4.81	5.19	-0.38
Q84.	Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	5.19	5.56	-0.37
Q36.	Advising/Computing - Advising/Computing - Satisfaction with: Quality of computing resources	5.65	6.00	-0.35
Q46.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	5.69	6.04	-0.35
Q48.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design experiments	5.00	5.29	-0.29
Q59.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	5.69	5.98	-0.29

NOTE: If a section is blank, this means that there were no questions that met those conditions.

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

	2010's Data			2009's Data			Comparison		Previous Year's Data							
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data		2007's Data		2006's Data		2005's Data	
Factor 1: Instruction & Interaction in Major Courses	26	4.54	0.88	48	4.46	1.03	0.08		4.48	0.06	4.47	0.07	4.53	0.01	4.42	0.12 ↑
Q13. Instruction and Faculty in your Engineering Major Quality of: Teaching	26	5.00	0.75	48	5.17	1.17	-0.17	↓	5.03	-0.03	4.71	0.29 ↑	5.12	-0.12 ↓	5.01	-0.01
Q14. Instruction and Faculty in your Engineering Major Quality of: Feedback on assignments (other than grades)	26	4.00	1.06	48	3.85	1.15	0.15	↑	4.08	-0.08	4.03	-0.03	4.05	-0.05	3.79	0.21 ↑
Q15. Instruction and Faculty in your Engineering Major Quality of: Student/faculty interaction	26	4.62	1.20	47	4.34	1.31	0.28	↑	4.34	0.28 ↑	4.67	-0.05	4.42	0.20 ↑	4.46	0.16 ↑
Factor 2: Aspects of Major Courses	26	5.14	0.74	48	5.27	0.95	-0.13	↓	5.09	0.05	5.24	-0.10 ↓	5.28	-0.14 ↓	5.19	-0.05
Q20. Satisfaction with: Grades in major courses accurately reflecting students' level of performance	26	4.88	1.42	47	4.96	1.76	-0.08		4.89	-0.01	4.95	-0.07	4.95	-0.07	4.63	0.25 ↑
Q21. Satisfaction with: Accessibility of major course instructors outside of class	26	5.50	0.99	48	5.48	1.11	0.02		5.27	0.23 ↑	5.64	-0.14 ↓	5.73	-0.23 ↓	5.32	0.18 ↑
Q22. Satisfaction with: Responsiveness to major course instructors to student concerns	26	5.23	1.03	46	5.20	1.24	0.03		4.97	0.26 ↑	5.33	-0.10 ↓	5.38	-0.15 ↓	5.40	-0.17 ↓
Q23. Satisfaction with: Amount of work required of in major courses	26	3.85	1.67	48	4.04	1.60	-0.19	↓	3.82	0.03	3.97	-0.12 ↓	4.06	-0.21 ↓	4.18	-0.33 ↓
Q30. Satisfaction with: Average size of major courses	26	5.50	1.07	48	5.94	1.10	-0.44	↓	5.84	-0.34 ↓	5.85	-0.35 ↓	5.80	-0.30 ↓	5.76	-0.26 ↓
Q31. Satisfaction with: Availability of courses in major	26	5.88	1.03	48	6.04	1.30	-0.16	↓	5.74	0.14 ↑	5.73	0.15 ↑	5.78	0.10 ↑	5.84	0.04
Factor 3: Breadth of Curriculum	26	4.43	0.99	48	4.56	1.16	-0.13	↓	4.61	-0.18 ↓	4.57	-0.14 ↓	4.70	-0.27 ↓	4.77	-0.34 ↓
Q24. Satisfaction with: Engineering curriculum instructors presentation of technology issues	26	4.65	1.06	48	4.73	1.36	-0.08		5.21	-0.56 ↓	4.91	-0.26 ↓	4.95	-0.30 ↓	4.77	-0.12 ↓
Q25. Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	26	4.58	1.36	48	4.71	1.62	-0.13	↓	4.66	-0.08	4.51	0.07	4.80	-0.22 ↓	5.06	-0.48 ↓
Q26. Satisfaction with: Opportunities for interaction with practitioners	24	3.88	1.23	37	3.92	1.55	-0.04		4.11	-0.23 ↓	4.18	-0.30 ↓	4.11	-0.23 ↓	4.50	-0.62 ↓
Q33. Satisfaction with: Amount of work in relationship to what was learned	26	4.54	1.48	48	4.73	1.41	-0.19	↓	4.42	0.12 ↑	4.58	-0.04	4.83	-0.29 ↓	4.73	-0.19 ↓

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1

NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

		2010's Data			2009's Data			Comparison		Previous Year's Data											
		N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data		2007's Data		2006's Data		2005's Data					
										Mean	Difference	Mean	Difference	Mean	Difference	Mean	Difference				
Factor 4: Team & Extracurricular Activities		26	5.36	0.99	48	5.02	1.53	0.34	↑	5.18	0.18	↑	5.22	0.14	↑	5.23	0.13	↑	5.26	0.10	↑
Q27.	Satisfaction with: Value derived from team experiences	26	5.35	0.80	48	5.23	1.59	0.12	↑	5.41	-0.06		5.54	-0.19	↓	5.44	-0.09		5.34	0.01	
Q28.	Satisfaction with: Value of Engineering program student organization activities	22	5.27	1.32	41	4.73	1.87	0.54	↑	5.03	0.24	↑	5.00	0.27	↑	5.20	0.07		5.05	0.22	↑
Q29.	Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	23	5.35	1.34	38	5.03	1.76	0.32	↑	5.03	0.32	↑	5.05	0.30	↑	4.96	0.39	↑	5.23	0.12	↑
Factor 5: Computing Resources		26	5.65	1.02	48	6.00	0.88	-0.35	↓	6.18	-0.53	↓	6.20	-0.55	↓	6.46	-0.81	↓	6.35	-0.70	↓
Q36.	Advising/Computing - Advising/Computing - Satisfaction with: Quality of computing resources	26	5.65	1.02	48	6.00	0.88	-0.35	↓	6.18	-0.53	↓	6.20	-0.55	↓	6.46	-0.81	↓	6.35	-0.70	↓
Factor 6: Fellow Students		26	5.35	0.89	48	5.64	1.13	-0.29	↓	5.58	-0.23	↓	5.68	-0.33	↓	5.67	-0.32	↓	5.75	-0.40	↓
Q37.	Classmates - Satisfaction with characteristics of your fellow students': Academic quality	26	5.23	1.27	48	5.88	0.94	-0.65	↓	5.76	-0.53	↓	5.77	-0.54	↓	5.88	-0.65	↓	5.94	-0.71	↓
Q38.	Classmates - Satisfaction with characteristics of your fellow students': Ability to work in teams	26	5.35	0.89	48	5.31	1.39	0.04		5.55	-0.20	↓	5.73	-0.38	↓	5.57	-0.22	↓	5.62	-0.27	↓
Q39.	Classmates - Satisfaction with characteristics of your fellow students': Level of camaraderie	26	5.46	0.90	48	5.73	1.57	-0.27	↓	5.46	0.00		5.51	-0.05		5.62	-0.16	↓	5.68	-0.22	↓
Factor 7: Career Services and Job Placement		24	4.90	0.90	45	5.21	1.38	-0.31	↓	5.32	-0.42	↓	5.50	-0.60	↓	5.53	-0.63	↓	5.23	-0.33	↓
Q40.	Career Services - Career Services - Satisfaction with: Assistance in preparation for permanent job search	23	5.30	1.36	43	5.42	1.82	-0.12	↓	5.78	-0.48	↓	5.54	-0.24	↓	5.79	-0.49	↓	5.68	-0.38	↓
Q41.	Career Services - Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	22	4.86	1.08	43	4.91	1.54	-0.05		5.14	-0.28	↓	5.28	-0.42	↓	5.45	-0.59	↓	5.10	-0.24	↓
Q42.	Career Services - Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	18	4.17	0.92	38	4.24	1.58	-0.07		4.37	-0.20	↓	4.27	-0.10	↓	4.58	-0.41	↓	4.00	0.17	↑
Q43.	Career Services - Career Services - Satisfaction with: Number of companies recruiting on campus	24	4.71	1.33	44	5.57	1.63	-0.86	↓	5.63	-0.92	↓	6.00	-1.29	↓	5.74	-1.03	↓	5.69	-0.98	↓
Q44.	Career Services - Career Services - Satisfaction with: Quality of companies recruiting on campus	24	5.38	1.01	45	5.64	1.49	-0.26	↓	5.70	-0.32	↓	6.03	-0.65	↓	5.84	-0.46	↓	5.53	-0.15	↓

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1

NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

		2010's Data			2009's Data			Comparison		Previous Year's Data											
		N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data			2007's Data		2006's Data		2005's Data				
										Mean	Difference		Mean	Difference		Mean	Difference		Mean	Difference	
Factor 8: System Design & Problem Solving		26	5.57	0.76	48	5.70	0.86	-0.13	↓	5.73	-0.16	↓	5.79	-0.22	↓	5.78	-0.21	↓	5.83	-0.26	↓
Q48.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design experiments	26	5.00	1.30	48	5.29	1.17	-0.29	↓	5.55	-0.55	↓	5.47	-0.47	↓	5.52	-0.52	↓	5.59	-0.59	↓
Q49.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	26	5.77	0.76	48	5.92	0.92	-0.15	↓	5.89	-0.12	↓	5.80	-0.03		6.06	-0.29	↓	6.06	-0.29	↓
Q50.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	25	6.28	0.79	48	6.19	0.89	0.09		6.05	0.23	↑	6.26	0.02		6.23	0.05		6.29	-0.01	
Q51.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Design a system, component, or process to meet desired needs	26	5.38	1.06	48	5.65	1.02	-0.27	↓	5.97	-0.59	↓	5.71	-0.33	↓	5.52	-0.14	↓	5.76	-0.38	↓
Q52.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Function on multidisciplinary teams	26	5.46	1.07	48	5.48	1.52	-0.02		5.18	0.28	↑	5.70	-0.24	↓	5.54	-0.08		5.42	0.04	
Factor 9: Impact of Engineering Solutions		26	4.90	0.98	48	4.98	1.38	-0.08		5.08	-0.18	↓	4.97	-0.07		4.89	0.01		4.52	0.38	↑
Q56.	Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	26	5.00	1.20	48	4.77	1.57	0.23	↑	5.21	-0.21	↓	5.05	-0.05		4.98	0.02		4.43	0.57	↑
Q69.	To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: A global/societal context	26	4.81	1.10	48	5.19	1.47	-0.38	↓	4.97	-0.16	↓	4.89	-0.08		4.80	0.01		4.61	0.20	↑

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

	2010's Data			2009's Data			Comparison		Previous Year's Data							
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data		2007's Data		2006's Data		2005's Data	
									Mean	Difference	Mean	Difference	Mean	Difference	Mean	Difference
Factor 10: Use of Tools and Text	26	5.18	0.77	48	5.34	0.91	-0.16	↓	5.37	-0.19 ↓	5.16	0.02	5.39	-0.21 ↓	5.23	-0.05
Q58. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	25	5.12	1.20	46	4.98	1.31	0.14	↑	5.19	-0.07	4.97	0.15 ↑	5.34	-0.22 ↓	4.99	0.13 ↑
Q59. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	26	5.69	0.88	47	5.98	0.90	-0.29	↓	5.81	-0.12 ↓	5.83	-0.14 ↓	5.89	-0.20 ↓	5.97	-0.28 ↓
Q62. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools specific to your primary academic major	26	5.46	1.10	46	5.74	1.25	-0.28	↓	6.00	-0.54 ↓	5.44	0.02	5.48	-0.02	5.54	-0.08
Q67. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	23	4.22	1.48	44	4.43	1.37	-0.21	↓	4.19	0.03	4.16	0.06	4.38	-0.16 ↓	3.90	0.32 ↑
Q68. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	24	5.17	0.92	47	5.62	1.24	-0.45	↓	5.44	-0.27 ↓	5.33	-0.16 ↓	5.70	-0.53 ↓	5.54	-0.37 ↓

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

	2010's Data			2009's Data			Comparison		Previous Year's Data							
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data		2007's Data		2006's Data		2005's Data	
									Mean	Difference	Mean	Difference	Mean	Difference	Mean	Difference
Factor 11: Apply Knowledge and Identify Problems	26	5.72	0.69	48	5.86	0.76	-0.14	↓	6.00	-0.28 ↓	5.86	-0.14 ↓	5.95	-0.23 ↓	5.87	-0.15 ↓
Q45. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	26	5.85	1.05	48	6.00	1.05	-0.15	↓	6.37	-0.52 ↓	6.17	-0.32 ↓	6.28	-0.43 ↓	6.21	-0.36 ↓
Q46. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	26	5.69	0.93	48	6.04	0.90	-0.35	↓	6.34	-0.65 ↓	6.08	-0.39 ↓	6.20	-0.51 ↓	6.10	-0.41 ↓
Q47. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	26	6.12	0.91	48	6.21	1.09	-0.09		6.18	-0.06	6.15	-0.03	6.03	0.09	6.03	0.09
Q53. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	26	5.73	0.83	48	5.69	0.99	0.04		5.84	-0.11 ↓	5.73	0.00	6.05	-0.32 ↓	6.04	-0.31 ↓
Q54. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	26	5.46	0.86	48	5.56	0.99	-0.10	↓	5.70	-0.24 ↓	5.52	-0.06	5.82	-0.36 ↓	5.74	-0.28 ↓
Q55. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	26	6.12	0.82	48	6.27	0.82	-0.15	↓	6.13	-0.01	6.06	0.06	6.06	0.06	6.25	-0.13 ↓
Q61. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	26	5.08	1.02	47	5.23	1.35	-0.15	↓	5.35	-0.27 ↓	5.35	-0.27 ↓	5.23	-0.15 ↓	4.75	0.33 ↑

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1

NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

	2010's Data			2009's Data			Comparison		Previous Year's Data							
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data		2007's Data		2006's Data		2005's Data	
Factor 12: Design Experience Built On Coursework	26	5.60	0.72	48	5.60	0.97	0.00		5.59	0.01	5.60	0.00	5.65	-0.05	5.43	0.17 ↑
Q64. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on knowledge from previous course work	26	5.77	0.95	48	5.90	0.99	-0.13	↓	5.76	0.01	5.83	-0.06	5.88	-0.11 ↓	5.58	0.19 ↑
Q65. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Built on skills from previous course work	26	5.81	0.90	48	5.83	1.08	-0.02		5.87	-0.06	5.73	0.08	5.86	-0.05	5.55	0.26 ↑
Q66. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Incorporated engineering standards	26	5.23	0.86	47	5.06	1.33	0.17	↑	5.13	0.10 ↑	5.23	0.00	5.20	0.03	5.14	0.09

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

		2010's Data			2009's Data			Comparison		Previous Year's Data											
		N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data			2007's Data		2006's Data		2005's Data				
										Mean	Difference			Mean	Difference	Mean	Difference	Mean	Difference		
Factor 13: Design Experience Issues		26	4.83	0.84	48	4.53	1.14	0.30	↑	5.02	-0.19	↓	4.79	0.04	4.61	0.22	↑	4.28	0.55	↑	
Q72.	System Design - To what degree did your system design experience address the following: Addressed Economic issues	25	5.52	1.12	48	5.42	1.47	0.10	↑	5.89	-0.37	↓	5.42	0.10	↑	5.16	0.36	↑	5.66	-0.14	↓
Q73.	System Design - To what degree did your system design experience address the following: Addressed Environmental issues	26	5.50	1.03	48	4.58	1.54	0.92	↑	5.53	-0.03		5.02	0.48	↑	4.88	0.62	↑	4.33	1.17	↑
Q74.	System Design - To what degree did your system design experience address the following: Addressed Social issues	26	4.15	1.08	48	3.75	1.60	0.40	↑	4.27	-0.12	↓	4.27	-0.12	↓	4.20	-0.05		3.61	0.54	↑
Q75.	System Design - To what degree did your system design experience address the following: Addressed Political issues	25	3.32	1.28	48	3.35	1.60	-0.03		3.65	-0.33	↓	3.65	-0.33	↓	3.62	-0.30	↓	3.03	0.29	↑
Q76.	System Design - To what degree did your system design experience address the following: Addressed Ethical issues	25	4.64	1.15	48	3.96	1.66	0.68	↑	4.71	-0.07		4.61	0.03		4.45	0.19	↑	4.16	0.48	↑
Q77.	System Design - To what degree did your system design experience address the following: Addressed Health and Safety issues	26	5.27	0.92	48	4.83	1.40	0.44	↑	5.39	-0.12	↓	5.06	0.21	↑	4.92	0.35	↑	4.33	0.94	↑
Q78.	System Design - To what degree did your system design experience address the following: Addressed Manufacturability issues	25	5.04	1.43	48	5.23	1.36	-0.19	↓	5.24	-0.20	↓	5.18	-0.14	↓	4.84	0.20	↑	4.65	0.39	↑
Q79.	System Design - To what degree did your system design experience address the following: Addressed Sustainability issues	25	5.04	1.27	48	5.15	1.46	-0.11	↓	5.45	-0.41	↓	5.08	-0.04		4.83	0.21	↑	4.53	0.51	↑
Factor 14: Laboratory Facilities		26	5.06	1.11	48	5.53	1.09	-0.47	↓	5.09	-0.03		5.57	-0.51	↓	5.42	-0.36	↓	5.51	-0.45	↓
Q80.	Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Established an atmosphere conducive to learning	26	5.08	1.13	48	5.56	1.07	-0.48	↓	5.18	-0.10	↓	5.47	-0.39	↓	5.43	-0.35	↓	5.41	-0.33	↓
Q81.	Laboratory Facilities - Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	26	5.04	1.25	48	5.50	1.25	-0.46	↓	5.00	0.04		5.67	-0.63	↓	5.40	-0.36	↓	5.62	-0.58	↓

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1

NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

	2010's Data			2009's Data			Comparison		Previous Year's Data							
									2008's Data		2007's Data		2006's Data		2005's Data	
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	Mean	Difference	Mean	Difference	Mean	Difference	Mean	Difference
Factor 15: Overall Program Effectiveness	26	5.40	1.19	48	5.45	1.27	-0.05		5.07	0.33	↑	5.10	0.30	↑	5.32	0.08
Q83. The Bottom Line - Overall Satisfaction - Extent that the Undergraduate Engineering program experience fulfill expectations	26	5.54	1.10	48	5.25	1.33	0.29	↑	5.00	0.54	↑	4.92	0.62	↑	5.22	0.32
Q84. Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	26	5.19	1.63	48	5.56	1.44	-0.37	↓	5.08	0.11	↑	5.27	-0.08		5.38	-0.19
Q85. How inclined are you to recommend your Undergraduate Engineering Major to a close friend	25	5.20	1.68	48	5.21	1.74	-0.01		4.89	0.31	↑	4.41	0.79	↑	5.02	0.18
Q86. How inclined are you to recommend your Undergraduate Engineering School to a close friend	26	5.62	1.50	48	5.79	1.27	-0.17	↓	5.34	0.28	↑	5.80	-0.18	↓	5.66	-0.04

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

	2010's Data			2009's Data			Comparison		Previous Year's Data								
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2008's Data			2007's Data		2006's Data		2005's Data	
	Mean	Std Dev		Mean	Std Dev		Difference	Arrow	Mean	Difference		Mean	Difference		Mean	Difference	
NOTE: These question(s) below do not comprise a study factor.																	
Q16. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Calculus	23	4.30	1.99	44	4.86	1.52	-0.56	↓	5.09	-0.79	↓	5.05	-0.75	↓	5.19	-0.89	↓
Q17. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Differential Equations	26	4.85	1.52	47	4.38	1.76	0.47	↑	4.53	0.32	↑	4.94	-0.09		4.72	0.13	↑
Q18. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Physics	24	3.42	1.77	45	4.00	1.72	-0.58	↓	4.12	-0.70	↓	4.47	-1.05	↓	3.79	-0.37	↓
Q19. Satisfaction with quality of teaching in required course work: (if course not taken on this campus, select "not applicable") Chemistry	26	5.19	1.44	47	5.72	1.14	-0.53	↓	5.50	-0.31	↓	5.75	-0.56	↓	5.69	-0.50	↓
Q32. Satisfaction with: Quality of Engineering classrooms	26	4.77	1.31	47	4.94	1.22	-0.17	↓	5.26	-0.49	↓	4.86	-0.09		5.22	-0.45	↓
Q34. Advising/Computing - Advising/Computing - Satisfaction with: Academic advising by faculty	26	4.08	1.65	47	4.30	1.94	-0.22	↓	4.58	-0.50	↓	4.52	-0.44	↓	4.52	-0.44	↓
Q35. Advising/Computing - Advising/Computing - Satisfaction with: Academic advising by non-faculty	21	5.05	1.50	27	4.81	1.24	0.24	↑	5.12	-0.07		4.60	0.45	↑	4.72	0.33	↑
Q57. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Understand professional responsibility	26	5.15	1.19	48	5.27	1.23	-0.12	↓	5.61	-0.46	↓	5.26	-0.11	↓	NA		NA
Q60. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	26	5.85	0.92	48	5.67	1.46	0.18	↑	5.73	0.12	↑	5.70	0.15	↑	5.78	0.07	
Q63. Program Outcomes and Assessment - Skill Development - Degree that engineering education enhanced ability to: Apply skills specific to your primary academic major	26	6.00	0.80	47	5.83	1.03	0.17	↑	5.87	0.13	↑	5.70	0.30	↑	NA		NA

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1

NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year

University of Wisconsin-Madison

Longitudinal: Five-Year Comparison for Engineering Major: Chemical/Molecular

	2010's Data			2009's Data			Comparison		Previous Year's Data							
									2008's Data		2007's Data		2006's Data		2005's Data	
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	Mean	Difference	Mean	Difference	Mean	Difference	Mean	Difference
Q70. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: An economic context	26	5.00	1.33	48	5.29	1.46	-0.29	↓	5.26	-0.26 ↓	5.17	-0.17 ↓	NA		NA	
Q71. To what degree did your engineering education enhance your ability to understand the impact of engineering solutions in: An environmental context	26	5.38	1.13	48	5.06	1.41	0.32	↑	5.32	0.06	5.08	0.30 ↑	NA		NA	
Q82. Course Comparison - Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	26	5.77	1.21	48	5.42	1.23	0.35	↑	5.47	0.30 ↑	5.08	0.69 ↑	5.16	0.61 ↑	5.47	0.30 ↑

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1

NA: Not Applicable - Your institution did not participate in the study that year, the factor/question is new, or this population did not participate that year