

University of Wisconsin-Madison

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

	Your Data		Your Select 6 Data There are 6 Institutions in this comparison group.										Comparison to Select 6			
	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					
Q1. Quality of Instruction and Faculty in Major Course Work: Teaching	51	5.24	1.09	4.83	5.53	4.33	4.90	5.00	4.50	4.33	5.53	4.72	1.15	0.52	▲	2
Q2. Quality of Instruction and Faculty in Major Course Work: Feedback on assignments (other than grades)	51	4.08	1.25	4.50	4.79	3.83	4.30	4.14	4.57	3.83	4.79	4.18	1.15	-0.10	▼	6
Q3. Quality of Instruction and Faculty in Major Course Work: Student/faculty interaction	51	4.55	1.21	5.00	5.47	4.29	4.80	5.43	5.38	4.29	5.47	4.77	1.38	-0.22	▼	6
Q8. Satisfaction with: Grades in major courses accurately reflecting students' level of performance	51	4.88	1.66	6.20	5.26	4.49	4.83	4.57	5.21	4.49	6.20	4.79	1.61	0.09	▲	4
Q9. Satisfaction with: Accessibility of major course instructors outside of class	50	5.60	1.12	5.83	6.09	4.97	5.53	5.64	5.93	4.97	6.09	5.41	1.22	0.19	▲	5
Q10. Satisfaction with: Responsiveness to major course instructors to student concerns	51	5.31	1.17	5.50	5.85	4.92	4.90	5.69	6.07	4.90	6.07	5.25	1.20	0.06	▲	5
Q11. Satisfaction with: Amount of work required of In major courses	51	3.98	1.58	5.33	4.38	4.12	4.17	4.64	4.64	4.12	5.33	4.29	1.45	-0.31	▼	7
Q18. Satisfaction with: Average size of major courses	51	5.96	1.04	5.67	5.94	5.06	6.10	6.43	6.57	5.06	6.57	5.62	1.29	0.34	▲	4
Q19. Satisfaction with: Availability of courses in major	51	5.84	1.38	6.00	6.06	4.82	5.70	5.64	5.43	4.82	6.06	5.33	1.53	0.51	▲	3
Q12. Satisfaction with: Engineering curriculum instructors presentation of technology issues	50	5.10	1.15	5.50	5.09	4.46	4.90	5.07	5.07	4.46	5.50	4.76	1.25	0.34	▲	2
Q13. Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	51	4.49	1.68	5.17	5.06	4.08	4.53	5.07	4.57	4.08	5.17	4.47	1.55	0.02	▲	6
Q14. Satisfaction with: Opportunities for interaction with practitioners	49	4.27	1.44	4.33	4.53	3.67	3.93	4.30	4.79	3.67	4.79	4.02	1.38	0.25	▲	5
Q21. Satisfaction with: Amount of work in relationship to what was learned	51	4.88	1.67	6.00	5.06	4.24	5.17	4.86	5.00	4.24	6.00	4.70	1.48	0.18	▲	5
Q15. Satisfaction with: Value derived from team experiences	49	5.51	1.26	4.83	6.00	5.24	5.67	5.57	6.08	4.83	6.08	5.52	1.30	-0.01	▼	5
Q16. Satisfaction with: Value of Engineering program student organization activities	40	5.13	1.40	4.50	4.26	5.11	4.57	5.09	5.21	4.26	5.21	4.86	1.52	0.27	▲	2
Q17. Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	39	5.15	1.41	4.50	4.24	5.17	4.80	5.38	5.43	4.24	5.43	4.95	1.46	0.20	▲	4

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data			Your Select 6 Data										Comparison to Select 6		
	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					
Q24. Advising/Computing - Satisfaction with: Quality of computing resources	51	6.00	1.30	5.33	5.56	5.70	5.13	5.50	5.79	5.13	5.79	5.56	1.41	0.44	▲	1
Q25. Advising/Computing - Satisfaction with: Availability of computers in the Engineering School	51	5.57	1.53	5.83	5.82	5.20	5.77	5.93	5.86	5.20	5.93	5.53	1.49	0.04	▲	6
Q26. Advising/Computing - Satisfaction with: Remote access to Engineering School's computer network	46	5.37	1.76	6.00	5.10	4.17	4.95	5.55	3.17	3.17	6.00	4.53	1.87	0.84	▲	3
Q27. Advising/Computing - Satisfaction with: Training to utilize Engineering School's computing resources	46	4.59	1.50	5.50	5.24	4.04	4.61	5.40	4.79	4.04	5.50	4.55	1.43	0.04	▲	6
Q28. Satisfaction with characteristics of your fellow students': Academic quality	51	5.88	0.93	5.83	6.35	5.71	5.80	6.00	6.29	5.71	6.35	5.91	1.03	-0.03	▼	4
Q29. Satisfaction with characteristics of your fellow students': Ability to work in teams	51	5.71	1.22	5.33	5.74	5.58	5.53	5.36	5.86	5.33	5.86	5.60	1.24	0.11	▲	3
Q30. Satisfaction with characteristics of your fellow students': Level of camaraderie	51	5.57	1.49	6.17	6.32	5.73	6.10	5.64	5.93	5.64	6.32	5.92	1.17	-0.35	▼	7
Q31. Career Services - Satisfaction with: Assistance in preparation for permanent job search	41	5.56	1.29	4.60	5.88	4.48	3.14	3.25	5.25	3.14	5.88	4.50	1.88	1.06	▲	2
Q32. Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	44	5.39	1.42	4.50	5.00	4.42	3.74	2.67	4.31	2.67	5.00	4.30	1.75	1.09	▲	1
Q33. Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	35	4.29	1.41	5.33	5.12	3.73	3.23	3.69	4.45	3.23	5.33	4.02	1.69	0.27	▲	4
Q34. Career Services - Satisfaction with: Number of companies recruiting on campus	45	5.04	1.74	4.33	5.29	4.31	3.11	2.07	4.46	2.07	5.29	4.16	1.81	0.88	▲	2
Q35. Career Services - Satisfaction with: Quality of companies recruiting on campus	45	5.80	1.31	5.00	5.82	4.92	4.41	2.77	5.25	2.77	5.82	4.88	1.67	0.92	▲	2

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data			Your Select 6 Data										Comparison to Select 6		
	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					
Q36. Skill Development - Degree that engineering education enhanced ability to: Design experiments	51	5.49	1.21	5.33	5.59	5.04	5.40	5.71	5.07	5.04	5.71	5.26	1.29	0.23	▲	3
Q37. Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	51	5.98	0.84	5.33	5.65	5.41	6.07	6.00	5.36	5.33	6.07	5.59	1.14	0.39	▲	3
Q38. Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	51	6.35	0.69	5.83	6.09	5.84	6.03	6.07	5.93	5.83	6.09	5.94	1.03	0.41	▲	1
Q39. Skill Development - Degree that engineering education enhanced ability to: Design a system, component, or process to meet desired needs	50	5.60	1.21	5.17	5.38	5.20	5.83	5.86	5.71	5.17	5.86	5.42	1.15	0.18	▲	4
Q40. Skill Development - Degree that engineering education enhanced ability to: Function on multidisciplinary teams	51	5.55	1.30	5.33	5.94	5.25	5.67	5.69	5.46	5.25	5.94	5.50	1.44	0.05	▲	4
Q42. Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	50	4.76	1.42	5.33	4.91	4.46	4.76	4.64	4.21	4.21	5.33	4.61	1.58	0.15	▲	3
Q43. Skill Development - Degree that engineering education enhanced ability to: Understand the impact of engineering solutions in a global/societal context	51	4.88	1.54	5.83	4.85	4.61	4.87	4.57	4.50	4.50	5.83	4.72	1.43	0.16	▲	2
Q44. Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools	51	5.39	0.98	5.00	5.59	5.21	4.93	5.14	5.43	4.93	5.59	5.24	1.34	0.15	▲	3
Q45. Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	50	5.30	1.11	5.17	5.12	4.89	5.80	5.64	6.00	4.89	6.00	5.22	1.47	0.08	▲	4
Q46. Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	50	5.76	1.19	5.33	5.62	5.27	5.87	5.64	5.69	5.27	5.87	5.49	1.30	0.27	▲	2
Q47. Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	49	3.65	1.60	4.33	4.07	3.64	4.25	4.18	3.22	3.22	4.33	3.86	1.59	-0.21	▼	5
Q48. Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	51	5.45	1.08	5.17	5.47	5.09	5.53	5.00	6.00	5.00	6.00	5.30	1.22	0.15	▲	4

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data		Your Select 6 Data There are 6 institutions in this comparison group.											Comparison to Select 6					
			N	Mean	Std Dev	Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Range of Means					Wt Mean	Std Dev	
	Min	Max																	
Q41. Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	51	6.20	0.80	5.17	6.32	5.66	5.97	6.00	6.36	5.17	6.36	5.89	1.18	0.31	▲	3			
Q50. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	51	6.22	0.90	6.00	6.15	5.63	5.97	5.93	6.36	5.63	6.36	5.87	1.14	0.35	▲	2			
Q51. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	51	6.22	1.03	6.67	6.12	5.69	5.90	6.00	6.21	5.69	6.67	5.89	1.04	0.33	▲	2			
Q52. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	51	6.14	0.89	6.33	6.12	5.53	5.73	6.00	6.07	5.53	6.33	5.77	1.15	0.37	▲	2			
Q53. Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	51	6.00	0.92	6.33	6.12	5.47	5.83	5.86	6.07	5.47	6.33	5.75	1.06	0.25	▲	4			
Q54. Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	51	5.86	0.85	6.33	5.82	5.04	5.67	5.14	5.50	5.04	6.33	5.37	1.22	0.49	▲	2			
Q55. Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	51	5.12	1.26	6.33	5.24	4.73	5.00	4.64	4.86	4.64	6.33	4.92	1.36	0.20	▲	3			
Q56. Major Design Experience - Degree that the major design experience: Built on knowledge from previous course work	51	5.92	0.80	6.17	5.59	5.46	5.80	5.57	6.14	5.46	6.17	5.62	1.23	0.30	▲	3			
Q57. Major Design Experience - Degree that the major design experience: Built on skills from previous course work	51	5.82	0.79	6.17	5.74	5.43	5.80	5.36	6.21	5.36	6.21	5.62	1.14	0.20	▲	3			
Q58. Major Design Experience - Degree that the major design experience: Incorporated engineering standards	50	5.24	1.04	6.50	4.82	5.16	5.28	5.14	5.29	4.82	6.50	5.17	1.32	0.07	▲	4			

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data			Your Select 6 Data <small>There are 6 institutions in this comparison group.</small>										Comparison to Select 6		
	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					
Q59. Major Design Experience - Degree that the major design experience: Addressed Economic Issues	51	5.63	1.20	6.00	5.44	5.29	5.73	6.00	5.79	5.29	6.00	5.50	1.34	0.13	▲	5
Q60. Major Design Experience - Degree that the major design experience: Addressed Environmental Issues	51	4.92	1.52	5.67	4.21	4.72	4.50	5.00	4.79	4.21	5.67	4.65	1.57	0.27	▲	3
Q61. Major Design Experience - Degree that the major design experience: Addressed Sustainability Issues	51	4.73	1.28	5.33	4.38	4.33	4.36	5.00	4.86	4.33	5.33	4.47	1.62	0.26	▲	4
Q62. Major Design Experience - Degree that the major design experience: Addressed Manufacturability Issues	51	4.61	1.40	5.33	4.67	4.66	4.96	5.43	4.36	4.36	5.43	4.77	1.54	-0.16	▼	6
Q63. Major Design Experience - Degree that the major design experience: Addressed Ethical Issues	50	4.04	1.43	5.67	3.94	4.15	4.30	3.85	3.71	3.71	5.67	4.13	1.64	-0.09	▼	4
Q64. Major Design Experience - Degree that the major design experience: Addressed Health and Safety Issues	51	4.45	1.50	5.50	4.62	4.62	4.83	5.07	5.14	4.62	5.50	4.75	1.49	-0.30	▼	7
Q65. Major Design Experience - Degree that the major design experience: Addressed Social Issues	50	3.88	1.60	5.50	3.79	4.00	4.00	4.43	3.71	3.71	5.50	4.02	1.61	-0.14	▼	5
Q66. Major Design Experience - Degree that the major design experience: Addressed Political Issues	49	3.24	1.77	5.00	3.18	3.36	3.43	3.25	3.43	3.18	5.00	3.39	1.72	-0.15	▼	6
Q67. Laboratory Facilities - Degree that laboratory facilities: Established an atmosphere conducive to learning	51	5.27	1.28	5.00	5.53	5.00	5.43	5.86	5.36	5.00	5.86	5.26	1.31	0.01	▲	5
Q68. Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	50	5.08	1.44	4.83	6.06	4.71	5.50	5.93	5.43	4.71	6.06	5.24	1.48	-0.16	▼	5
Q69. Laboratory Facilities - Degree that laboratory facilities: Allowed use of modern engineering tools	51	4.86	1.40	5.00	5.21	4.85	4.66	5.57	4.93	4.66	5.57	4.95	1.51	-0.09	▼	5
Q71. Expectations: Extent that the Undergraduate Engineering program experience fulfill expectations	51	5.04	1.41	5.17	5.41	4.83	5.03	4.57	4.79	4.57	5.41	4.96	1.38	0.08	▲	3
Q72. Overall Value: Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	51	5.27	1.71	5.00	4.74	5.18	4.67	4.21	5.14	4.21	5.18	4.94	1.37	0.33	▲	1
Q73. Recommendations: How inclined are you to recommend your Undergraduate Engineering Major to a close friend	51	4.63	1.93	4.50	5.50	4.88	5.23	4.93	4.50	4.50	5.50	5.01	1.68	-0.38	▼	5
Q74. Recommendations: How inclined are you to recommend your Undergraduate Engineering School to a close friend	51	5.75	1.34	5.67	5.47	5.41	5.37	4.86	5.36	4.86	5.67	5.38	1.41	0.37	▲	1

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data		Your Select 6 Data There are 6 institutions in this comparison group.										Comparison to Select 6			
	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					
Q4. Satisfaction with quality of teaching in required course work: Calculus	47	5.09	1.72	5.50	5.30	4.88	4.76	4.58	5.78	4.58	5.78	4.99	1.54	0.10	▲	4
Q5. Satisfaction with quality of teaching in required course work: Differential Equations	50	4.50	1.79	4.67	6.16	4.85	5.66	5.40	4.86	4.67	6.16	5.24	1.62	-0.74	▼	7
Q6. Satisfaction with quality of teaching in required course work: Physics	48	3.31	1.93	5.50	4.44	4.09	4.14	4.33	5.18	4.09	5.50	4.31	1.80	-1.00	▼	7
Q7. Satisfaction with quality of teaching in required course work: Chemistry	51	5.86	1.15	5.50	5.63	5.60	4.90	4.67	5.67	4.67	5.67	5.42	1.32	0.44	▲	1
Q20. Satisfaction with: Quality of Engineering classrooms	51	4.96	1.50	5.67	5.41	5.23	5.37	5.86	4.43	4.43	5.86	5.29	1.38	-0.33	▼	6
Q22. Advising/Computing - Satisfaction with: Academic advising by faculty	50	4.14	2.11	6.00	5.24	3.14	5.00	4.92	4.64	3.14	6.00	4.15	2.04	-0.01	▼	6
Q23. Advising/Computing - Satisfaction with: Academic advising by non-faculty	39	5.41	1.27	5.17	5.10	3.86	5.00	3.80	4.63	3.80	5.17	4.35	1.73	1.06	▲	1
Q49. Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	51	5.73	1.39	5.50	5.82	5.02	5.70	5.07	5.36	5.02	5.82	5.32	1.35	0.41	▲	2
Q70. Course Comparison: Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	51	5.29	1.55	4.50	5.47	4.73	4.79	5.14	4.36	4.36	5.47	4.87	1.45	0.42	▲	2

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data		Carnegie Class Data and Comparisons There are 23 institutions in this Carnegie Class.						All Institution Data and Comparisons There are 32 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			
Q1. Quality of Instruction and Faculty in Major Course Work: Teaching	51	5.24	1.09	4.78	1.17	3.59	5.53	0.46	▲	6	4.83	1.14	3.59	6.00	0.41	▲	10
Q2. Quality of Instruction and Faculty in Major Course Work: Feedback on assignments (other than grades)	51	4.08	1.25	4.25	1.21	3.53	5.00	-0.17	▼	17	4.37	1.23	3.53	6.50	-0.29	▼	26
Q3. Quality of Instruction and Faculty in Major Course Work: Student/faculty interaction	51	4.55	1.21	4.81	1.45	3.53	6.33	-0.26	▼	19	4.98	1.44	3.53	6.50	-0.43	▼	28
Q8. Satisfaction with: Grades in major courses accurately reflecting students' level of performance	51	4.88	1.66	4.83	1.66	3.68	6.20	0.05	▲	12	4.90	1.63	3.68	6.20	-0.02	▼	20
Q9. Satisfaction with: Accessibility of major course instructors outside of class	50	5.60	1.12	5.55	1.25	4.59	6.56	0.05	▲	17	5.65	1.23	4.59	6.80	-0.05	▼	25
Q10. Satisfaction with: Responsiveness to major course instructors to student concerns	51	5.31	1.17	5.24	1.31	3.93	6.78	0.07	▲	15	5.33	1.28	3.93	6.78	-0.02	▼	23
Q11. Satisfaction with: Amount of work required of in major courses	51	3.98	1.58	4.52	1.54	3.69	5.42	-0.54	▼	21	4.63	1.51	3.69	6.33	-0.65	▼	30
Q18. Satisfaction with: Average size of major courses	51	5.96	1.04	5.78	1.22	4.86	6.89	0.18	▲	14	5.85	1.20	4.86	6.89	0.11	▲	19
Q19. Satisfaction with: Availability of courses in major	51	5.84	1.38	5.35	1.67	3.69	6.33	0.49	▲	10	5.39	1.64	3.69	6.50	0.45	▲	14
Q12. Satisfaction with: Engineering curriculum instructors presentation of technology issues	50	5.10	1.15	4.91	1.30	4.12	5.56	0.19	▲	10	4.97	1.29	4.12	6.50	0.13	▲	17
Q13. Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	51	4.49	1.68	4.60	1.56	3.71	5.89	-0.11	▼	13	4.69	1.53	3.71	7.00	-0.20	▼	20
Q14. Satisfaction with: Opportunities for interaction with practitioners	49	4.27	1.44	4.13	1.48	3.36	5.36	0.14	▲	13	4.17	1.47	3.36	6.00	0.10	▲	19
Q21. Satisfaction with: Amount of work in relationship to what was learned	51	4.88	1.67	4.89	1.46	3.85	6.11	-0.01	▼	16	4.96	1.44	3.75	6.11	-0.08	▼	24
Q15. Satisfaction with: Value derived from team experiences	49	5.51	1.26	5.41	1.38	4.69	6.44	0.10	▲	12	5.43	1.38	4.69	6.50	0.08	▲	17
Q16. Satisfaction with: Value of Engineering program student organization activities	40	5.13	1.40	4.85	1.45	3.86	5.33	0.28	▲	3	4.91	1.41	3.86	5.60	0.22	▲	9
Q17. Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	39	5.15	1.41	4.84	1.41	4.19	5.43	0.31	▲	5	4.90	1.41	4.19	5.90	0.25	▲	11

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Carnegie Class Data and Comparisons										All Institution Data and Comparisons									
	Your Data			There are 23 institutions in this Carnegie Class.							There are 32 total participating Institutions									
	N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means Min	Max	Difference in Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means Min	Max	Difference in Means	Arrow	Rank			
Q24. Advising/Computing - Satisfaction with: Quality of computing resources	51	6.00	1.30	5.52	1.50	3.40	6.56	0.48	▲	6	5.55	1.46	3.40	6.56	0.45	▲	11			
Q25. Advising/Computing - Satisfaction with: Availability of computers in the Engineering School	51	5.57	1.53	5.55	1.52	3.80	6.78	0.02	▲	13	5.57	1.51	3.80	7.00	0.00		19			
Q26. Advising/Computing - Satisfaction with: Remote access to Engineering School's computer network	46	5.37	1.76	4.80	1.79	3.17	6.26	0.57	▲	6	4.84	1.79	3.17	6.50	0.53	▲	8			
Q27. Advising/Computing - Satisfaction with: Training to utilize Engineering School's computing resources	46	4.59	1.50	4.54	1.49	3.20	5.82	0.05	▲	11	4.61	1.50	3.20	5.82	-0.02	▼	18			
Q28. Satisfaction with characteristics of your fellow students': Academic quality	51	5.88	0.93	5.70	1.14	4.81	6.35	0.18	▲	7	5.70	1.15	4.81	7.00	0.18	▲	12			
Q29. Satisfaction with characteristics of your fellow students': Ability to work in teams	51	5.71	1.22	5.50	1.33	4.64	6.22	0.21	▲	6	5.52	1.33	4.64	6.50	0.19	▲	10			
Q30. Satisfaction with characteristics of your fellow students': Level of camaraderie	51	5.57	1.49	5.70	1.37	4.66	6.56	-0.13	▼	15	5.74	1.36	4.66	6.80	-0.17	▼	21			
Q31. Career Services - Satisfaction with: Assistance in preparation for permanent job search	41	5.56	1.29	4.49	1.83	2.10	5.88	1.07	▲	2	4.46	1.81	2.10	5.88	1.10	▲	2			
Q32. Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	44	5.39	1.42	4.07	1.79	2.60	5.39	1.32	▲	1	3.98	1.79	1.40	5.39	1.41	▲	1			
Q33. Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	35	4.29	1.41	3.81	1.71	2.60	5.50	0.48	▲	8	3.83	1.69	2.20	5.50	0.46	▲	10			
Q34. Career Services - Satisfaction with: Number of companies recruiting on campus	45	5.04	1.74	3.88	1.91	2.07	5.29	1.16	▲	2	3.83	1.87	2.00	5.29	1.21	▲	2			
Q35. Career Services - Satisfaction with: Quality of companies recruiting on campus	45	5.80	1.31	4.64	1.77	2.77	5.82	1.16	▲	2	4.59	1.76	2.77	6.00	1.21	▲	3			

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data		Carnegie Class Data and Comparisons There are 23 institutions in this Carnegie Class.							All Institution Data and Comparisons There are 32 total participating institutions							
	N	Mean	Std Dev	Wt Mean*	Std Dev*	Range of Means Min Max		Difference In Means	Arrow	Rank	Wt Mean*	Std Dev*	Range of Means Min Max		Difference In Means	Arrow	Rank
Q36. Skill Development - Degree that engineering education enhanced ability to: Design experiments	51	5.49	1.21	5.26	1.26	3.60	5.75	0.23	▲	8	5.33	1.25	3.60	6.50	0.16	▲	15
Q37. Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	51	5.98	0.84	5.59	1.11	4.60	6.07	0.39	▲	3	5.63	1.10	4.60	6.50	0.35	▲	8
Q38. Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	51	6.35	0.69	5.91	1.00	5.20	6.35	0.44	▲	1	5.94	0.97	5.20	7.00	0.41	▲	4
Q39. Skill Development - Degree that engineering education enhanced ability to: Design a system, component, or process to meet desired needs	50	5.60	1.21	5.45	1.23	4.00	6.11	0.15	▲	9	5.51	1.20	4.00	6.50	0.09	▲	16
Q40. Skill Development - Degree that engineering education enhanced ability to: Function on multidisciplinary teams	51	5.55	1.30	5.27	1.54	3.60	6.56	0.28	▲	6	5.30	1.52	3.60	6.56	0.25	▲	11
Q42. Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	50	4.76	1.42	4.96	1.52	4.20	5.78	-0.20	▼	16	5.06	1.51	4.20	7.00	-0.30	▼	25
Q43. Skill Development - Degree that engineering education enhanced ability to: Understand the impact of engineering solutions in a global/societal context	51	4.88	1.54	4.95	1.44	3.90	5.83	-0.07	▼	14	5.02	1.45	3.90	6.50	-0.14	▼	22
Q44. Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools	51	5.39	0.98	5.27	1.25	4.20	6.00	0.12	▲	8	5.30	1.24	4.20	6.00	0.09	▲	13
Q45. Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	50	5.30	1.11	5.37	1.33	4.52	6.33	-0.07	▼	15	5.41	1.32	4.52	7.00	-0.11	▼	21
Q46. Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	50	5.76	1.19	5.62	1.21	5.05	6.22	0.14	▲	10	5.67	1.19	5.05	7.00	0.09	▲	17
Q47. Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	49	3.65	1.60	3.95	1.58	3.00	4.82	-0.30	▼	17	4.01	1.60	3.00	5.30	-0.36	▼	25
Q48. Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	51	5.45	1.08	5.39	1.22	4.83	6.44	0.06	▲	12	5.40	1.23	4.83	6.44	0.05	▲	16

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Carnegie Class Data and Comparisons										All Institution Data and Comparisons									
	Your Data				There are 23 institutions in this Carnegie Class.						There are 32 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					
Q41. Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	51	6.20	0.80		5.94	1.04	5.17	6.56	0.26	▲	8	5.97	1.02	5.17	6.83	0.23	▲	12		
Q50. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	51	6.22	0.90		5.90	1.06	4.80	6.45	0.32	▲	5	5.92	1.06	4.80	7.00	0.30	▲	7		
Q51. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	51	6.22	1.03		5.93	0.97	5.00	6.67	0.29	▲	6	5.95	0.97	5.00	6.83	0.27	▲	9		
Q52. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	51	6.14	0.89		5.86	1.04	5.29	6.44	0.28	▲	5	5.89	1.03	5.29	6.67	0.25	▲	8		
Q53. Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	51	6.00	0.92		5.79	1.02	5.20	6.56	0.21	▲	9	5.83	1.00	5.20	6.56	0.17	▲	15		
Q54. Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	51	5.86	0.85		5.46	1.18	4.40	6.33	0.40	▲	3	5.51	1.15	4.40	6.33	0.35	▲	7		
Q55. Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	51	5.12	1.26		5.04	1.33	3.60	6.33	0.08	▲	13	5.10	1.32	3.60	6.33	0.02	▲	20		
Q56. Major Design Experience - Degree that the major design experience: Built on knowledge from previous course work	51	5.92	0.80		5.74	1.16	4.60	6.89	0.18	▲	9	5.77	1.15	4.60	7.00	0.15	▲	14		
Q57. Major Design Experience - Degree that the major design experience: Built on skills from previous course work	51	5.82	0.79		5.66	1.14	4.80	6.89	0.16	▲	7	5.70	1.13	4.80	7.00	0.12	▲	13		
Q58. Major Design Experience - Degree that the major design experience: Incorporated engineering standards	50	5.24	1.04		5.34	1.26	4.77	6.67	-0.10	▼	17	5.37	1.26	4.58	6.67	-0.13	▼	24		

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

	Your Data										Carnegie Class Data and Comparisons There are 23 institutions in this Carnegie Class.										All Institution Data and Comparisons There are 32 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																
Q59. Major Design Experience - Degree that the major design experience: Addressed Economic issues	51	5.63	1.20	5.52	1.29	4.28	6.67	0.11	▲	15	5.52	1.30	4.28	6.67	0.11	▲	19													
Q60. Major Design Experience - Degree that the major design experience: Addressed Environmental issues	51	4.92	1.52	4.95	1.49	4.19	6.22	-0.03	▼	14	5.00	1.49	4.19	6.50	-0.08	▼	21													
Q61. Major Design Experience - Degree that the major design experience: Addressed Sustainability issues	51	4.73	1.28	4.73	1.46	4.15	5.67	0.00		15	4.78	1.46	4.15	7.00	-0.05	▼	22													
Q62. Major Design Experience - Degree that the major design experience: Addressed Manufacturability issues	51	4.61	1.40	4.79	1.48	4.06	5.55	-0.18	▼	19	4.84	1.47	4.06	6.00	-0.23	▼	27													
Q63. Major Design Experience - Degree that the major design experience: Addressed Ethical issues	50	4.04	1.43	4.43	1.60	3.30	5.67	-0.39	▼	17	4.53	1.59	3.30	6.50	-0.49	▼	26													
Q64. Major Design Experience - Degree that the major design experience: Addressed Health and Safety issues	51	4.45	1.50	5.00	1.47	4.00	6.22	-0.55	▼	20	5.07	1.45	4.00	6.50	-0.62	▼	29													
Q65. Major Design Experience - Degree that the major design experience: Addressed Social issues	50	3.88	1.60	4.23	1.61	3.35	5.50	-0.35	▼	18	4.29	1.59	3.35	6.50	-0.41	▼	26													
Q66. Major Design Experience - Degree that the major design experience: Addressed Political issues	49	3.24	1.77	3.72	1.74	3.18	5.00	-0.48	▼	21	3.76	1.73	2.64	6.00	-0.52	▼	28													
Q67. Laboratory Facilities - Degree that laboratory facilities: Established an atmosphere conducive to learning	51	5.27	1.28	5.25	1.35	3.40	6.04	0.02	▲	12	5.32	1.32	3.40	6.10	-0.05	▼	20													
Q68. Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	50	5.08	1.44	5.17	1.43	3.60	6.11	-0.09	▼	14	5.28	1.41	3.60	6.50	-0.20	▼	22													
Q69. Laboratory Facilities - Degree that laboratory facilities: Allowed use of modern engineering tools	51	4.86	1.40	4.91	1.53	2.20	5.78	-0.05	▼	12	4.96	1.51	2.20	6.00	-0.10	▼	19													
Q71. Expectations: Extent that the Undergraduate Engineering program experience fulfill expectations	51	5.04	1.41	4.90	1.38	3.93	5.65	0.14	▲	10	4.95	1.35	3.93	6.00	0.09	▲	17													
Q72. Overall Value: Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	51	5.27	1.71	4.92	1.48	3.80	5.91	0.35	▲	6	4.89	1.45	3.80	5.91	0.38	▲	8													
Q73. Recommendations: How inclined are you to recommend your Undergraduate Engineering Major to a close friend	51	4.63	1.93	4.96	1.69	3.90	6.39	-0.33	▼	17	5.01	1.65	3.90	6.39	-0.38	▼	26													
Q74. Recommendations: How inclined are you to recommend your Undergraduate Engineering School to a close friend	51	5.75	1.34	5.21	1.52	4.25	6.17	0.54	▲	3	5.22	1.51	4.25	6.50	0.53	▲	5													

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

Note: This is a question about your own campus.	Your Data		Carnegie Class Data and Comparisons There are 23 institutions in this Carnegie Class.					All Institution Data and Comparisons There are 32 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			
Q4. Satisfaction with quality of teaching in required course work: Calculus	47	5.09	1.72	5.11	1.53	4.55	6.00	-0.02	▼	14	5.14	1.51	4.50	6.50	-0.05	▼	18
Q5. Satisfaction with quality of teaching in required course work: Differential Equations	50	4.50	1.79	4.90	1.69	4.00	6.16	-0.40	▼	20	4.94	1.67	4.00	6.17	-0.44	▼	29
Q6. Satisfaction with quality of teaching in required course work: Physics	48	3.31	1.93	4.30	1.79	3.06	5.50	-0.99	▼	22	4.37	1.78	3.06	6.80	-1.06	▼	30
Q7. Satisfaction with quality of teaching in required course work: Chemistry	51	5.86	1.15	5.40	1.35	4.67	5.86	0.46	▲	2	5.39	1.39	3.53	6.80	0.47	▲	5
Q20. Satisfaction with: Quality of Engineering classrooms	51	4.96	1.50	5.16	1.39	3.80	6.16	-0.20	▼	15	5.22	1.40	3.80	6.60	-0.26	▼	22
Q22. Advising/Computing - Satisfaction with: Academic advising by faculty	50	4.14	2.11	4.74	1.93	3.14	6.13	-0.60	▼	22	4.86	1.87	3.14	6.17	-0.72	▼	31
Q23. Advising/Computing - Satisfaction with: Academic advising by non-faculty	39	5.41	1.27	4.73	1.59	3.38	6.00	0.68	▲	5	4.76	1.57	3.38	6.00	0.65	▲	7
Q49. Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	51	5.73	1.39	5.50	1.33	4.80	6.05	0.23	▲	9	5.55	1.30	4.80	6.31	0.18	▲	16
Q70. Course Comparison: Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	51	5.29	1.55	5.21	1.49	3.89	6.27	0.08	▲	12	5.28	1.46	3.89	6.50	0.01	▲	20

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc 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

Question Means Sorted from Highest Mean to Lowest Mean

Question Means Sorted from Highest Mean to Lowest Mean	Your Data	Select 6 Comparison						Carnegie Class		All Institution						
		There are 6 institutions in this comparison group.						Mean Difference Rank	Mean Difference Rank	Mean Difference Rank						
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6									
Q51. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	6.22	6.67	6.12	5.69	5.90	6.00	6.21	5.89	0.33 ▲	2	5.93	0.29 ▲	6	5.95	0.27 ▲	9
Q50. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	6.22	6.00	6.15	5.63	5.97	5.93	6.36	5.87	0.35 ▲	2	5.90	0.32 ▲	5	5.92	0.30 ▲	7
Q52. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	6.14	6.33	6.12	5.53	5.73	6.00	6.07	5.77	0.37 ▲	2	5.86	0.28 ▲	5	5.89	0.25 ▲	8
Q38. Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	6.35	5.83	6.09	5.84	6.03	6.07	5.93	5.94	0.41 ▲	1	5.91	0.44 ▲	1	5.94	0.41 ▲	4
Q37. Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	5.98	5.33	5.65	5.41	6.07	6.00	5.36	5.59	0.39 ▲	3	5.59	0.39 ▲	3	5.63	0.35 ▲	8
Q36. Skill Development - Degree that engineering education enhanced ability to: Design experiments	5.49	5.33	5.59	5.04	5.40	5.71	5.07	5.26	0.23 ▲	3	5.26	0.23 ▲	8	5.33	0.16 ▲	15
Q39. Skill Development - Degree that engineering education enhanced ability to: Design a system, component, or process to meet desired needs	5.60	5.17	5.38	5.20	5.83	5.86	5.71	5.42	0.18 ▲	4	5.45	0.15 ▲	9	5.51	0.09 ▲	16
Q40. Skill Development - Degree that engineering education enhanced ability to: Function on multidisciplinary teams	5.55	5.33	5.94	5.25	5.67	5.69	5.46	5.50	0.05 ▲	4	5.27	0.28 ▲	6	5.30	0.25 ▲	11

▼ : Wisc has a lower mean than the mean of the comparative group ▲ : Wisc has a higher mean than the mean of the comparative group

NOTE: Carnegie Class and All Institution Means are weighted are calculated without University of Wisconsin-Madison's data included
NOTE: There are 23 institutions in this Carnegie Class. There are 32 total participating institutions.

University of Wisconsin-Madison

ABET Questions: All Comparative Groups for Engineering Major: Chemical

Question Means Sorted from Highest Mean to Lowest Mean

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 Institution						
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6	Mean	Difference	Rank	Mean	Difference	Rank			
Q41. Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	6.20	5.17	6.32	5.66	5.97	6.00	6.36	5.89	0.31 ▲	3	5.94	0.26 ▲	8	5.97	0.23 ▲	12
Q53. Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	6.00	6.33	6.12	5.47	5.83	5.86	6.07	5.75	0.25 ▲	4	5.79	0.21 ▲	9	5.83	0.17 ▲	15
Q54. Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	5.86	6.33	5.82	5.04	5.67	5.14	5.50	5.37	0.49 ▲	2	5.46	0.40 ▲	3	5.51	0.35 ▲	7
Q42. Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	4.76	5.33	4.91	4.46	4.76	4.64	4.21	4.61	0.15 ▲	3	4.96	-0.20 ▼	16	5.06	-0.30 ▼	25
Q46. Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	5.76	5.33	5.62	5.27	5.87	5.64	5.69	5.49	0.27 ▲	2	5.62	0.14 ▲	10	5.67	0.09 ▲	17
Q45. Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	5.30	5.17	5.12	4.89	5.80	5.64	6.00	5.22	0.08 ▲	4	5.37	-0.07 ▼	15	5.41	-0.11 ▼	21
Q43. Skill Development - Degree that engineering education enhanced ability to: Understand the impact of engineering solutions in a global/societal context	4.88	5.83	4.85	4.61	4.87	4.57	4.50	4.72	0.16 ▲	2	4.95	-0.07 ▼	14	5.02	-0.14 ▼	22

▼ : Wisc has a lower mean than the mean of the comparative group ▲ : Wisc has a higher mean than the mean of the comparative group

NOTE: Carnegie Class and All Institution Means are weighted and calculated without University of Wisconsin-Madison's data included
NOTE: There are 23 institutions in this Carnegie Class. There are 32 total participating institutions.

University of Wisconsin-Madison

ABET Questions: All Comparative Groups for Engineering Major: Chemical

Question Means Sorted from Highest Mean to Lowest Mean	Your Data	Select 6 Comparison						Carnegie Class	All Institution										
		There are 6 institutions in this comparison group.																	
		Sel 1	Sel 2	Sel 3	Sel 4	Sel 5	Sel 6			Mean Difference Rank	Mean Difference Rank	Mean Difference Rank							
Q49. Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	5.73	5.50	5.82	5.02	5.70	5.07	5.36	5.32	0.41	▲	2	5.50	0.23	▲	9	5.55	0.18	▲	16
Q55. Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	5.12	6.33	5.24	4.73	5.00	4.64	4.86	4.92	0.20	▲	3	5.04	0.08	▲	13	5.10	0.02	▲	20
Q25. Advising/Computing - Satisfaction with: Availability of computers in the Engineering School	5.57	5.83	5.82	5.20	5.77	5.93	5.86	5.53	0.04	▲	6	5.55	0.02	▲	13	5.57	0.00		19
Q44. Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools	5.39	5.00	5.59	5.21	4.93	5.14	5.43	5.24	0.15	▲	3	5.27	0.12	▲	8	5.30	0.09	▲	13
Q26. Advising/Computing - Satisfaction with: Remote access to Engineering School's computer network	5.37	6.00	5.10	4.17	4.95	5.55	3.17	4.53	0.84	▲	3	4.80	0.57	▲	6	4.84	0.53	▲	8
Q69. Laboratory Facilities - Degree that laboratory facilities: Allowed use of modern engineering tools	4.86	5.00	5.21	4.85	4.66	5.57	4.93	4.95	-0.09	▼	5	4.91	-0.05	▼	12	4.96	-0.10	▼	19
Q27. Advising/Computing - Satisfaction with: Training to utilize Engineering School's computing resources	4.59	5.50	5.24	4.04	4.61	5.40	4.79	4.55	0.04	▲	6	4.54	0.05	▲	11	4.61	-0.02	▼	18

▼: Wisc has a lower mean than the mean of the comparative group ▲: Wisc has a higher mean than the mean of the comparative group

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

NOTE: There are 23 institutions in this Carnegie Class. There are 32 total participating institutions.

University of Wisconsin-Madison

Highest and Lowest Mean Questions for Engineering Major: Chemical

	Response	Mean	Std Dev
Q38. Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	51	6.35	0.69
Q51. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	51	6.22	1.03
Q50. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	51	6.22	0.90
Q41. Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	51	6.20	0.80
Q52. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	51	6.14	0.89
Q24. Advising/Computing - Satisfaction with: Quality of computing resources	51	6.00	1.30
Q53. Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	51	6.00	0.92
Q37. Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	51	5.98	0.84
Q18. Satisfaction with: Average size of major courses	51	5.96	1.04
Q56. Major Design Experience - Degree that the major design experience: Built on knowledge from previous course work	51	5.92	0.80
Q28. Satisfaction with characteristics of your fellow students: Academic quality	51	5.88	0.93
Q54. Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	51	5.86	0.85
Q7. Satisfaction with quality of teaching in required course work: Chemistry	51	5.86	1.15
Q19. Satisfaction with: Availability of courses in major	51	5.84	1.38
Q57. Major Design Experience - Degree that the major design experience: Built on skills from previous course work	51	5.82	0.79
Q66. Major Design Experience - Degree that the major design experience: Addressed Political issues	49	3.24	1.77
Q6. Satisfaction with quality of teaching in required course work: Physics	48	3.31	1.93
Q47. Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	49	3.65	1.60
Q65. Major Design Experience - Degree that the major design experience: Addressed Social issues	50	3.88	1.60
Q11. Satisfaction with: Amount of work required of in major courses	51	3.98	1.58
Q63. Major Design Experience - Degree that the major design experience: Addressed Ethical issues	50	4.04	1.43
Q2. Quality of instruction and Faculty in Major Course Work: Feedback on assignments (other than grades)	51	4.08	1.25
Q22. Advising/Computing - Satisfaction with: Academic advising by faculty	50	4.14	2.11
Q14. Satisfaction with: Opportunities for interaction with practitioners	49	4.27	1.44
Q33. Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	35	4.29	1.41
Q64. Major Design Experience - Degree that the major design experience: Addressed Health and Safety issues	51	4.45	1.50
Q13. Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	51	4.49	1.68
Q5. Satisfaction with quality of teaching in required course work: Differential Equations	50	4.50	1.79
Q3. Quality of instruction and Faculty in Major Course Work: Student/faculty interaction	51	4.55	1.21
Q27. Advising/Computing - Satisfaction with: Training to utilize Engineering School's computing resources	46	4.59	1.50

University of Wisconsin-Madison

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

	Select 1	Select 2	Select 3	Select 4	Select 5	Select 6	Difference
Q32. Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	5.39	4.30	1.09				
Q23. Advising/Computing - Satisfaction with: Academic advising by non-faculty	5.41	4.35	1.06				
Q31. Career Services - Satisfaction with: Assistance in preparation for permanent job search	5.56	4.50	1.06				
Q35. Career Services - Satisfaction with: Quality of companies recruiting on campus	5.80	4.88	0.92				
Q34. Career Services - Satisfaction with: Number of companies recruiting on campus	5.04	4.16	0.88				
Q26. Advising/Computing - Satisfaction with: Remote access to Engineering School's computer network	5.37	4.53	0.84				
Q1. Quality of Instruction and Faculty in Major Course Work: Teaching	5.24	4.72	0.52				
Q19. Satisfaction with: Availability of courses in major	5.84	5.33	0.51				
Q54. Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	5.86	5.37	0.49				
Q24. Advising/Computing - Satisfaction with: Quality of computing resources	6.00	5.56	0.44				
Q7. Satisfaction with quality of teaching in required course work: Chemistry	5.86	5.42	0.44				
Q70. Course Comparison: Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	5.29	4.87	0.42				
Q49. Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	5.73	5.32	0.41				
Q38. Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	6.35	5.94	0.41				
Q37. Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	5.98	5.59	0.39				
Q6. Satisfaction with quality of teaching in required course work: Physics	3.31	4.31	-1.00				
Q5. Satisfaction with quality of teaching in required course work: Differential Equations	4.50	5.24	-0.74				
Q73. Recommendations: How inclined are you to recommend your Undergraduate Engineering Major to a close friend	4.63	5.01	-0.38				
Q30. Satisfaction with characteristics of your fellow students: Level of camaraderie	5.57	5.92	-0.35				
Q20. Satisfaction with: Quality of Engineering classrooms	4.96	5.29	-0.33				
Q11. Satisfaction with: Amount of work required of in major courses	3.98	4.29	-0.31				
Q64. Major Design Experience - Degree that the major design experience: Addressed Health and Safety Issues	4.45	4.75	-0.30				
Q3. Quality of Instruction and Faculty in Major Course Work: Student/faculty interaction	4.55	4.77	-0.22				
Q47. Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	3.65	3.86	-0.21				
Q68. Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	5.08	5.24	-0.16				
Q62. Major Design Experience - Degree that the major design experience: Addressed Manufacturability Issues	4.61	4.77	-0.16				
Q66. Major Design Experience - Degree that the major design experience: Addressed Political Issues	3.24	3.39	-0.15				
Q65. Major Design Experience - Degree that the major design experience: Addressed Social Issues	3.88	4.02	-0.14				
Q2. Quality of Instruction and Faculty in Major Course Work: Feedback on assignments (other than grades)	4.08	4.18	-0.10				
Q63. Major Design Experience - Degree that the major design experience: Addressed Ethical Issues	4.04	4.13	-0.09				

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

	2002	2004	Difference
Q64. Major Design Experience - Degree that the major design experience: Addressed Health and Safety issues	4.45	3.16	1.29
Q60. Major Design Experience - Degree that the major design experience: Addressed Environmental issues	4.92	3.77	1.15
Q63. Major Design Experience - Degree that the major design experience: Addressed Ethical issues	4.04	2.91	1.13
Q43. Skill Development - Degree that engineering education enhanced ability to: Understand the impact of engineering solutions in a global/societal context	4.88	3.93	0.95
Q61. Major Design Experience - Degree that the major design experience: Addressed Sustainability issues	4.73	3.84	0.89
Q65. Major Design Experience - Degree that the major design experience: Addressed Social issues	3.88	3.00	0.88
Q31. Career Services - Satisfaction with: Assistance in preparation for permanent job search	5.56	4.68	0.88
Q42. Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	4.76	3.89	0.87
Q45. Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	5.30	4.44	0.86
Q56. Major Design Experience - Degree that the major design experience: Built on knowledge from previous course work	5.92	5.09	0.83
Q59. Major Design Experience - Degree that the major design experience: Addressed Economic issues	5.63	4.81	0.82
Q58. Major Design Experience - Degree that the major design experience: Incorporated engineering standards	5.24	4.42	0.82
Q44. Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools	5.39	4.64	0.75
Q55. Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	5.12	4.39	0.73
Q57. Major Design Experience - Degree that the major design experience: Built on skills from previous course work	5.82	5.12	0.70
Difference			
Q6. Satisfaction with quality of teaching in required course work: Physics	3.31	4.05	-0.74
Q23. Advising/Computing - Satisfaction with: Academic advising by non-faculty	5.41	5.94	-0.53
Q30. Satisfaction with characteristics of your fellow students: Level of camaraderie	5.57	5.84	-0.27
Q24. Advising/Computing - Satisfaction with: Quality of computing resources	6.00	6.20	-0.20
Q72. Overall Value: Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	5.27	5.36	-0.09
Q29. Satisfaction with characteristics of your fellow students: Ability to work in teams	5.71	5.80	-0.09
Q11. Satisfaction with: Amount of work required of in major courses	3.98	4.05	-0.07
Q5. Satisfaction with quality of teaching in required course work: Differential Equations	4.50	4.56	-0.06
Q28. Satisfaction with characteristics of your fellow students: Academic quality	5.88	5.93	-0.05

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

	2004's Data			2003's Data			Comparison		Previous Year's Data					Mean Difference				
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2002's Data		2001's Data		2000's Data					
									Mean	Difference	Mean	Difference	Mean	Difference				
Q1. Quality of Instruction and Faculty in Major Course Work: Teaching	51	5.24	1.09	45	4.76	1.11	0.48	↑	4.77	0.47	↑	5.57	-0.33	↓	5.06	0.18	↑	NA
Q2. Quality of Instruction and Faculty in Major Course Work: Feedback on assignments (other than grades)	51	4.08	1.25	45	3.67	1.22	0.41	↑	4.20	-0.12	↓	4.61	-0.53	↓	4.39	-0.31	↓	NA
Q3. Quality of Instruction and Faculty in Major Course Work: Student/faculty interaction	51	4.55	1.21	45	4.07	1.42	0.48	↑	3.93	0.62	↑	4.73	-0.18	↓	4.56	-0.01		NA
Q8. Satisfaction with: Grades in major courses accurately reflecting students' level of performance	51	4.88	1.66	45	4.84	1.58	0.04		4.80	0.08		5.36	-0.48	↓	4.97	-0.09		NA
Q9. Satisfaction with: Accessibility of major course instructors outside of class	50	5.60	1.12	43	5.05	1.21	0.55	↑	5.53	0.07		5.50	0.10	↑	5.30	0.30	↑	NA
Q10. Satisfaction with: Responsiveness to major course instructors to student concerns	51	5.31	1.17	43	4.81	1.44	0.50	↑	4.90	0.41	↑	5.36	-0.05		5.13	0.18	↑	NA
Q11. Satisfaction with: Amount of work required of in major courses	51	3.98	1.58	44	4.05	1.55	-0.07		3.83	0.15	↑	4.66	-0.68	↓	4.34	-0.36	↓	NA
Q18. Satisfaction with: Average size of major courses	51	5.96	1.04	45	5.42	1.25	0.54	↑	5.30	0.66	↑	5.86	0.10	↑	5.52	0.44	↑	NA
Q19. Satisfaction with: Availability of courses in major	51	5.84	1.38	45	5.62	1.30	0.22	↑	5.87	-0.03		5.32	0.52	↑	5.72	0.12	↑	NA
Q12. Satisfaction with: Engineering curriculum	50	5.10	1.15	45	4.76	1.17	0.34	↑	4.30	0.80	↑	4.91	0.19	↑	5.00	0.10	↑	NA
Q13. Satisfaction with: Opportunities for practical experiences within Undergraduate curriculum	51	4.49	1.68	45	4.29	1.71	0.20	↑	4.79	-0.30	↓	4.95	-0.46	↓	4.71	-0.22	↓	NA
Q14. Satisfaction with: Opportunities for interaction with practitioners	49	4.27	1.44	41	4.00	1.47	0.27	↑	3.81	0.46	↑	4.33	-0.06		4.48	-0.21	↓	NA
Q21. Satisfaction with: Amount of work in relationship to what was learned	51	4.88	1.67	45	4.49	1.63	0.39	↑	4.87	0.01		4.52	0.36	↑	4.70	0.18	↑	NA

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your school 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

	2004's Data			2003's Data			Comparison		Previous Year's Data								
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2002's Data		2001's Data		2000's Data		1999's Data		
									Mean	Difference	Mean	Difference	Mean	Difference	Mean Difference		
Q15. Satisfaction with: Value derived from team experiences	49	5.51	1.26	44	5.41	1.11	0.10	↑	5.30	0.21	↑	5.58	-0.07	5.57	-0.06	NA	
Q16. Satisfaction with: Value of Engineering program student organization activities	40	5.13	1.40	37	4.92	1.01	0.21	↑	5.21	-0.08	5.31	-0.18	↓	5.23	-0.10	↓	
Q17. Satisfaction with: Leadership opportunities in Engineering program's extracurricular activities	39	5.15	1.41	33	4.85	1.00	0.30	↑	5.43	-0.28	↓	5.39	-0.24	↓	5.44	-0.29	↓
Q24. Advising/Computing - Satisfaction with: Quality of computing resources	51	6.00	1.30	44	6.20	0.70	-0.20	↓	6.13	-0.13	↓	6.43	-0.43	↓	5.94	0.06	NA
Q25. Advising/Computing - Satisfaction with: Availability of computers in the Engineering School	51	5.57	1.53	44	5.23	1.76	0.34	↑	5.07	0.50	↑	5.34	0.23	↑	4.89	0.68	↑
Q26. Advising/Computing - Satisfaction with: Remote access to Engineering School's computer network	46	5.37	1.76	35	4.80	1.68	0.57	↑	5.10	0.27	↑	5.22	0.15	↑	4.51	0.86	↑
Q27. Advising/Computing - Satisfaction with: Training to utilize Engineering School's computing resources	46	4.59	1.50	43	4.53	1.39	0.06		4.43	0.16	↑	4.97	-0.38	↓	4.69	-0.10	↓
Q28. Satisfaction with characteristics of your fellow students': Academic quality	51	5.88	0.93	44	5.93	0.97	-0.05		6.00	-0.12	↓	6.09	-0.21	↓	5.93	-0.05	NA
Q29. Satisfaction with characteristics of your fellow students': Ability to work in teams	51	5.71	1.22	44	5.80	1.00	-0.09		5.73	-0.02	5.75	-0.04	5.79	-0.08	NA		
Q30. Satisfaction with characteristics of your fellow students': Level of camaraderie	51	5.57	1.49	44	5.84	1.46	-0.27	↓	5.59	-0.02	5.70	-0.13	↓	5.86	-0.29	↓	

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your school 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

	2004's Data			2003's Data			Comparison		Previous Year's Data									
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2002's Data		2001's Data		2000's Data		1999's Data			
										Mean	Difference	Mean	Difference	Mean	Difference	Mean	Difference	
Q31. Career Services - Satisfaction with: Assistance in preparation for permanent job search	41	5.56	1.29	41	4.68	1.71	0.88	↑	5.84	-0.28	↓	6.10	-0.54	↓	5.48	0.08	NA	
Q32. Career Services - Satisfaction with: Geographic distribution of companies recruiting on campus	44	5.39	1.42	40	4.75	1.45	0.64	↑	4.42	0.97	↑	4.93	0.46	↑	5.09	0.30	↑	NA
Q33. Career Services - Satisfaction with: Access to school's alumni to cultivate career opportunities	35	4.29	1.41	35	3.91	1.79	0.38	↑	4.00	0.29	↑	4.18	0.11	↑	4.15	0.14	↑	NA
Q34. Career Services - Satisfaction with: Number of companies recruiting on campus	45	5.04	1.74	41	4.71	1.57	0.33	↑	5.37	-0.33	↓	5.80	-0.76	↓	5.50	-0.46	↓	NA
Q35. Career Services - Satisfaction with: Quality of companies recruiting on campus	45	5.80	1.31	41	5.12	1.19	0.68	↑	5.78	0.02		6.00	-0.20	↓	5.84	-0.04		NA
Q36. Skill Development - Degree that engineering education enhanced ability to: Design experiments	51	5.49	1.21	44	4.80	1.44	0.69	↑	5.23	0.26	↑	5.34	0.15	↑	5.23	0.26	↑	NA
Q37. Skill Development - Degree that engineering education enhanced ability to: Conduct experiments	51	5.98	0.84	44	5.30	1.27	0.68	↑	5.87	0.11	↑	5.82	0.16	↑	5.76	0.22	↑	NA
Q38. Skill Development - Degree that engineering education enhanced ability to: Analyze and interpret data	51	6.35	0.69	44	6.11	0.92	0.24	↑	6.27	0.08		6.41	-0.06		6.07	0.28	↑	NA
Q39. Skill Development - Degree that engineering education enhanced ability to: Design a system, component, or process to meet desired needs	50	5.60	1.21	44	5.18	1.28	0.42	↑	5.40	0.20	↑	5.39	0.21	↑	5.51	0.09		NA
Q40. Skill Development - Degree that engineering education enhanced ability to: Function on multidisciplinary teams	51	5.55	1.30	43	5.05	1.62	0.50	↑	5.17	0.38	↑	5.14	0.41	↑	5.31	0.24	↑	NA
Q42. Skill Development - Degree that engineering education enhanced ability to: Understand ethical responsibilities	50	4.76	1.42	44	3.89	1.62	0.87	↑	4.47	0.29	↑	4.55	0.21	↑	4.30	0.46	↑	NA
Q43. Skill Development - Degree that engineering education enhanced ability to: Understand the impact of engineering solutions in a global/societal context	51	4.88	1.54	44	3.93	1.63	0.95	↑	3.87	1.01	↑	4.64	0.24	↑	4.22	0.66	↑	NA

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your school 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

	2004's Data			2003's Data			Comparison		Previous Year's Data						
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2002's Data		2001's Data		2000's Data		1999's Data
Q44. Skill Development - Degree that engineering education enhanced ability to: Use modern engineering tools	51	5.39	0.98	44	4.64	1.64	0.75	↑	5.37	0.02	5.39	0.00	5.32	0.07	NA
Q45. Skill Development - Degree that engineering education enhanced ability to: Communicate using oral progress reports	50	5.30	1.11	43	4.44	1.64	0.86	↑	5.03	0.27	5.02	0.28	5.02	0.28	↑
Q46. Skill Development - Degree that engineering education enhanced ability to: Communicate using written progress reports	50	5.76	1.19	43	5.23	1.63	0.53	↑	5.90	-0.14	5.95	-0.19	5.67	0.09	NA
Q47. Skill Development - Degree that engineering education enhanced ability to: Pilot test a component prior to implementation	49	3.65	1.60	42	3.52	1.71	0.13	↑	3.74	-0.09	3.63	0.02	4.02	-0.37	↓
Q48. Skill Development - Degree that engineering education enhanced ability to: Use text materials to support project design	51	5.45	1.08	44	5.09	1.24	0.36	↑	5.50	-0.05	5.45	0.00	5.45	0.00	NA

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

NA: Not Applicable - Your school 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

	2004's Data			2003's Data			Comparison		Previous Year's Data												
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2002's Data		2001's Data		2000's Data		1999's Data						
										Mean	Difference	Mean	Difference	Mean	Difference	Mean	Difference				
241. Skill Development - Degree that engineering education enhanced ability to: Solve engineering problems	51	6.20	0.80	44	5.86	1.07	0.34	↑		6.33	-0.13	↓		6.36	-0.16	↓		6.02	0.18	↑	NA
250. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of mathematics	51	6.22	0.90	44	6.00	0.91	0.22	↑		6.40	-0.18	↓		NA				NA			NA
251. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of science	51	6.22	1.03	44	5.77	1.14	0.45	↑		6.03	0.19	↑		NA				NA			NA
252. Skill Development - Degree that engineering education enhanced ability to: Apply knowledge of engineering	51	6.14	0.89	44	5.48	1.07	0.66	↑		5.97	0.17	↑		NA				NA			NA
253. Skill Development - Degree that engineering education enhanced ability to: Identify engineering problems	51	6.00	0.92	44	5.55	1.04	0.45	↑		5.77	0.23	↑		NA				NA			NA
254. Skill Development - Degree that engineering education enhanced ability to: Formulate engineering problems	51	5.86	0.85	44	5.25	1.30	0.61	↑		5.47	0.39	↑		NA				NA			NA
255. Skill Development - Degree that engineering education enhanced ability to: Understand contemporary issues	51	5.12	1.26	44	4.39	1.59	0.73	↑		4.67	0.45	↑		NA				NA			NA
Q56. Major Design Experience - Degree that the major design experience: Built on knowledge from previous course work	51	5.92	0.80	43	5.09	1.31	0.83	↑		5.67	0.25	↑		5.86	0.06			5.68	0.24	↑	NA
Q57. Major Design Experience - Degree that the major design experience: Built on skills from previous course work	51	5.82	0.79	43	5.12	1.35	0.70	↑		5.77	0.05			5.81	0.01			5.64	0.18	↑	NA
Q58. Major Design Experience - Degree that the major design experience: Incorporated engineering standards	50	5.24	1.04	43	4.42	1.56	0.82	↑		5.13	0.11	↑		5.24	0.00			5.04	0.20	↑	NA

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your school 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

	2004's Data			2003's Data			Comparison		Previous Year's Data					Mean Difference					
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2002's Data		2001's Data		2000's Data						
										Mean	Difference	Mean	Difference	Mean	Difference				
Q59. Major Design Experience - Degree that the major design experience: Addressed Economic issues	51	5.63	1.20	43	4.81	1.58	0.82	↑		5.53	0.10	↑	5.56	0.07	5.21	0.42	↑	NA	
Q60. Major Design Experience - Degree that the major design experience: Addressed Environmental issues	51	4.92	1.52	43	3.77	1.56	1.15	↑		4.23	0.69	↑	4.14	0.78	↑	4.45	0.47	↑	NA
Q61. Major Design Experience - Degree that the major design experience: Addressed Sustainability issues	51	4.73	1.28	43	3.84	1.51	0.89	↑		4.30	0.43	↑	4.33	0.40	↑	4.32	0.41	↑	NA
Q62. Major Design Experience - Degree that the major design experience: Addressed Manufacturability issues	51	4.61	1.40	43	4.16	1.59	0.45	↑		4.93	-0.32	↓	4.79	-0.18	↓	4.55	0.06		NA
Q63. Major Design Experience - Degree that the major design experience: Addressed Ethical issues	50	4.04	1.43	43	2.91	1.54	1.13	↑		4.10	-0.06		4.38	-0.34	↓	3.52	0.52	↑	NA
Q64. Major Design Experience - Degree that the major design experience: Addressed Health and Safety issues	51	4.45	1.50	43	3.16	1.45	1.29	↑		4.23	0.22	↑	4.24	0.21	↑	4.05	0.40	↑	NA
Q65. Major Design Experience - Degree that the major design experience: Addressed Social issues	50	3.88	1.60	43	3.00	1.69	0.88	↑		3.53	0.35	↑	3.60	0.28	↑	3.26	0.62	↑	NA
Q66. Major Design Experience - Degree that the major design experience: Addressed Political issues	49	3.24	1.77	43	2.74	1.48	0.50	↑		3.10	0.14	↑	3.07	0.17	↑	2.70	0.54	↑	NA
Q67. Laboratory Facilities - Degree that laboratory facilities: Established an atmosphere conducive to learning	51	5.27	1.28	44	5.09	1.22	0.18	↑		5.47	-0.20	↓	5.50	-0.23	↓	5.23	0.04		NA
Q68. Laboratory Facilities - Degree that laboratory facilities: Fostered student/faculty interaction	50	5.08	1.44	44	5.00	1.43	0.08			5.53	-0.45	↓	5.48	-0.40	↓	5.22	-0.14	↓	NA
Q69. Laboratory Facilities - Degree that laboratory facilities: Allowed use of modern engineering tools	51	4.86	1.40	43	4.35	1.54	0.51	↑		4.77	0.09		4.64	0.22	↑	4.60	0.26	↑	NA

Difference = Difference between means. Arrow Designations - ↓ denotes a difference < -0.1; ↑ denotes difference > 0.1
 NA: Not Applicable - Your school 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

	2004's Data			2003's Data			Comparison		2002's Data		2001's Data		2000's Data		1999's Data
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	Mean	Difference	Mean	Difference	Mean	Difference	Mean Difference
Q71. Expectations: Extent that the Undergraduate Engineering program experience fulfill expectations	51	5.04	1.41	44	4.70	1.62	0.34	↑	4.97	0.07	5.27	-0.23 ↓	5.03	0.01	NA
Q72. Overall Value: Comparing the expense to the quality of education, rate the value of the investment made in Undergraduate Engineering program	51	5.27	1.71	44	5.36	1.42	-0.09		5.57	-0.30 ↓	5.89	-0.62 ↓	5.51	-0.24 ↓	NA
Q73. Recommendations: How inclined are you to recommend your Undergraduate Engineering Major to a close friend	51	4.63	1.93	44	4.32	1.91	0.31	↑	4.13	0.50 ↑	5.41	-0.78 ↓	5.16	-0.53 ↓	NA
Q74. Recommendations: How inclined are you to recommend your Undergraduate Engineering School to a close friend	51	5.75	1.34	44	5.52	1.65	0.23	↑	6.00	-0.25 ↓	6.02	-0.27 ↓	6.03	-0.28 ↓	NA

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

NA: Not Applicable - Your school 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

	2004's Data			2003's Data			Comparison		Previous Year's Data									
	N	Mean	Std Dev	N	Mean	Std Dev	Difference	Arrow	2002's Data		2001's Data		2000's Data		1999's Data			
									Mean	Difference	Mean	Difference	Mean	Difference	Mean Difference			
24. Satisfaction with quality of teaching in required course work: Calculus	47	5.09	1.72	37	4.59	1.61	0.50	↑	5.12	-0.03	5.46	-0.37	↓	5.36	-0.27	↓	NA	
25. Satisfaction with quality of teaching in required course work: Differential Equations	50	4.50	1.79	45	4.56	1.82	-0.06		4.93	-0.43	↓	4.85	-0.35	↓	4.76	-0.26	↓	NA
26. Satisfaction with quality of teaching in required course work: Physics	48	3.31	1.93	38	4.05	1.47	-0.74	↓	3.50	-0.19	↓	2.88	0.43	↑	3.95	-0.64	↓	NA
27. Satisfaction with quality of teaching in required course work: Chemistry	51	5.86	1.15	42	5.36	1.12	0.50	↑	5.76	0.10	↑	5.83	0.03		5.75	0.11	↑	NA
220. Satisfaction with: Quality of Engineering classrooms	51	4.96	1.50	45	4.84	1.48	0.12	↑	4.67	0.29	↑	4.59	0.37	↑	4.90	0.06		NA
222. Advising/Computing - Satisfaction with: Academic advising by faculty	50	4.14	2.11	44	3.98	1.81	0.16	↑	4.53	-0.39	↓	4.95	-0.81	↓	4.22	-0.08		NA
223. Advising/Computing - Satisfaction with: Academic advising by non-faculty	39	5.41	1.27	34	5.94	1.41	-0.53	↓	6.17	-0.76	↓	5.79	-0.38	↓	5.57	-0.16	↓	NA
249. Skill Development - Degree that engineering education enhanced ability to: Recognize need to engage in lifelong learning	51	5.73	1.39	44	5.09	1.60	0.64	↑	5.27	0.46	↑	5.81	-0.08		5.20	0.53	↑	NA
270. Course Comparison: Quality of teaching in your Engineering courses compare to the quality of teaching in Non-Engineering courses on this campus	51	5.29	1.55	44	5.23	1.33	0.06		5.03	0.26	↑	5.44	-0.15	↓	5.30	-0.01		NA

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