

# Schools of Engineering

## THE TOP SCHOOLS

Rank/School	Overall score	Peer assessment score (5.0=highest)	Recruiter assessment score (5.0=highest)	'08 average quantitative GRE score	'08 acceptance rate	'08 Ph.D. students/faculty	'08 faculty membership in National Academy of Engineering	'08 engineering school research expenditures (in millions)	'08 research expenditures per faculty member (in thousands)	Ph.D.'s granted 2007-2008	'08 total graduate engineering enrollment
1. Massachusetts Institute of Technology	100	5.0	4.8	779	22.9%	4.5	13.1%	\$244.1	\$659.6	304	2,706
2. Stanford University (CA)	98	4.9	4.7	775	27.9%	7.3	17.9%	\$162.5	\$728.5	234	3,374
3. University of California—Berkeley	88	4.8	4.5	773	17.8%	5.7	16.9%	\$137.3	\$567.2	252	1,774
4. Georgia Institute of Technology	86	4.5	4.4	767	30.0%	4.0	4.6%	\$225.0	\$452.7	359	4,347
5. University of Illinois—Urbana-Champaign	83	4.6	4.3	772	19.0%	4.1	3.9%	\$198.3	\$486.1	287	2,539
6. Carnegie Mellon University (PA)	81	4.3	4.3	771	25.8%	4.5	9.6%	\$163.4	\$746.2	173	1,868
7. California Institute of Technology	79	4.7	4.6	790	11.5%	4.7	8.2%	\$76.2	\$769.2	94	515
7. University of Southern California (Viterbi)	79	3.6	3.5	759	46.2%	5.3	18.3%	\$167.6	\$1,022.1	154	3,882
9. University of Michigan—Ann Arbor	75	4.4	4.1	776	36.1%	4.0	4.2%	\$155.3	\$485.4	240	2,518
10. University of Texas—Austin (Cockrell)	74	4.3	4.0	759	23.3%	3.4	8.3%	\$143.9	\$589.6	199	2,099
11. Cornell University (NY)	73	4.3	4.1	781	23.3%	4.2	10.6%	\$116.4	\$603.3	109	1,426
12. Purdue University—West Lafayette (IN)	72	4.2	4.2	766	33.4%	4.0	4.4%	\$148.2	\$418.7	214	2,416
12. University of California—San Diego (Jacobs)	72	3.8	3.8	767	22.8%	4.3	9.9%	\$136.1	\$777.9	128	1,195
14. Texas A&M University—College Station (Look)	70	3.7	3.7	755	36.9%	2.4	2.7%	\$213.9	\$694.4	181	2,698
14. University of California—Los Angeles (Samueli)	70	3.8	3.8	765	38.6%	5.5	16.0%	\$92.7	\$622.1	133	1,502
16. University of Wisconsin—Madison	69	4.1	3.9	771	19.7%	3.5	4.0%	\$133.9	\$587.3	163	1,570
17. University of Maryland—College Park (Clark)	66	3.6	3.7	752	25.4%	3.8	6.4%	\$144.5	\$617.5	184	1,853
18. Harvard University (MA)	65	3.6	3.8	781	15.0%	6.1	17.9%	\$36.7	\$655.9	28	383
18. Princeton University (NJ)	65	4.1	4.0	786	16.1%	3.8	12.5%	\$61.0	\$496.2	78	516
18. University of California—Santa Barbara	65	3.5	3.6	767	20.5%	4.1	14.5%	\$98.4	\$718.6	101	712
21. Columbia University (Fu Foundation) (NY)	64	3.6	3.5	773	28.7%	4.2	13.3%	\$92.9	\$678.4	86	1,657
21. Northwestern University (McCormick) (IL)	64	3.9	3.9	771	26.1%	3.9	5.0%	\$101.5	\$564.1	114	1,261
23. Pennsylvania State University—University Park	59	3.8	3.8	740	33.7%	3.1	0.9%	\$117.8	\$354.8	188	1,715
23. University of Minnesota—Twin Cities	59	3.7	3.7	759	30.4%	3.9	5.2%	\$88.2	\$432.4	126	1,889
25. Johns Hopkins University (Whiting) (MD)	58	3.9	3.9	767	34.6%	4.3	2.2%	\$60.6	\$465.8	81	2,703
25. University of Florida	58	3.4	3.5	759	39.2%	4.4	2.5%	\$106.3	\$374.1	189	2,711
27. Ohio State University	57	3.5	3.5	751	26.8%	3.2	2.4%	\$117.2	\$474.7	153	1,458
27. University of Pennsylvania	57	3.5	3.5	763	33.9%	3.9	7.6%	\$77.3	\$743.5	69	1,148
27. University of Washington	57	3.7	3.6	708	29.2%	3.9	4.8%	\$96.3	\$474.3	108	1,471
27. Virginia Tech	57	3.7	3.8	744	23.7%	2.6	2.5%	\$115.6	\$335.0	135	1,936
31. North Carolina State University	55	3.4	3.5	757	24.8%	2.9	3.7%	\$121.4	\$420.0	114	2,306
31. Rensselaer Polytechnic Institute (NY)	55	3.5	3.9	758	33.3%	3.1	2.5%	\$71.2	\$434.1	96	1,064
33. University of California—Davis	54	3.4	3.6	743	29.4%	4.1	5.9%	\$75.7	\$413.6	121	1,093
34. Rice University (Brown) (TX)	53	3.6	3.7	762	19.8%	4.6	5.6%	\$36.2	\$328.9	81	553
35. Duke University (Pratt) (NC)	52	3.5	3.5	751	27.4%	3.4	1.8%	\$67.8	\$599.8	68	651
35. University of California—Irvine (Samueli)	52	3.1	3.5	763	23.3%	3.9	5.8%	\$75.5	\$463.4	103	1,028
37. University of Virginia	51	3.4	3.4	762	19.2%	3.4	5.7%	\$53.6	\$391.2	86	774
38. University of Rochester (NY)	50	2.7	2.9	764	23.7%	3.7	3.5%	\$82.6	\$1,019.4	34	480
39. Vanderbilt University (TN)	49	3.2	3.4	748	12.5%	4.0	2.5%	\$51.3	\$633.8	51	397
40. University of Colorado—Boulder	48	3.3	3.4	756	54.7%	3.5	3.9%	\$54.8	\$383.5	74	1,334
40. Yale University (CT)	48	3.3	3.5	777	15.6%	2.6	9.2%	\$24.1	\$409.2	30	188
42. Boston University	47	3.0	3.2	760	28.2%	3.3	4.1%	\$67.2	\$542.3	62	648
42. Iowa State University	47	3.3	3.4	752	16.2%	2.4	1.4%	\$68.8	\$334.0	76	1,012
42. Lehigh University (Rossin) (PA)	47	3.1	3.4	766	24.2%	3.8	9.4%	\$31.1	\$291.1	55	560
45. Arizona State University (Fulton)	46	3.2	3.2	754	38.4%	3.1	3.0%	\$57.8	\$301.3	123	2,082
46. Case Western Reserve University (OH)	44	3.2	3.5	752	33.4%	3.1	1.9%	\$39.6	\$359.8	56	598
46. University of Delaware	44	2.9	3.3	749	17.4%	3.8	4.0%	\$46.0	\$373.8	54	673
46. Washington University in St. Louis (Sever)	44	3.3	3.5	769	25.0%	3.5	2.4%	\$21.8	\$245.0	45	646
49. University of Pittsburgh (Swanson)	43	2.9	3.2	760	36.0%	2.8	0.8%	\$68.8	\$542.1	45	747
50. University of Massachusetts—Amherst	42	3.0	3.2	759	20.2%	3.1	0.7%	\$48.7	\$318.3	63	626

Sources: U.S. News, the schools. Assessment data collected by Synovate.

SPECIALTIES

PROGRAMS RANKED BEST BY ENGINEERING SCHOOL DEPARTMENT HEADS

Rank/School Average assessment score (5.0=highest)

**AEROSPACE/AERONAUTICAL/ASTRONAUTICAL**

1. California Institute of Technology	4.8
1. Massachusetts Institute of Technology	4.8
3. Stanford University (CA)	4.7
4. Georgia Institute of Technology	4.3
4. Purdue University—West Lafayette (IN)	4.3
4. University of Michigan—Ann Arbor	4.3
7. University of Illinois—Urbana-Champaign	4.0
8. University of Texas—Austin (Cockrell)	3.8
9. Princeton University (NJ)	3.7
9. University of Maryland—College Park (Clark)	3.7

**BIOLOGICAL/AGRICULTURAL**

1. Cornell University (NY)	4.7
1. Purdue University—West Lafayette (IN)	4.7
3. Iowa State University	4.3
3. Texas A&M University—College Station (Look)	4.3
3. University of Illinois—Urbana-Champaign	4.3
6. North Carolina State University	3.9
7. University of Florida	3.8
7. Virginia Tech	3.8
9. Pennsylvania State University—University Park	3.6
9. University of Nebraska—Lincoln	3.6

**BIOMEDICAL/BIOENGINEERING**

1. Johns Hopkins University (Whiting) (MD)	4.8
2. Georgia Institute of Technology	4.6
2. University of California—San Diego (Jacobs)	4.6
4. Duke University (NC)	4.4
5. Massachusetts Institute of Technology	4.2
5. University of Washington	4.2
7. Rice University (Brown) (TX)	4.1
7. University of Pennsylvania	4.1
9. Boston University	4.0
10. Stanford University (CA)	3.9
10. Washington University in St. Louis (Sever)	3.9

**CHEMICAL**

1. Massachusetts Institute of Technology	4.9
2. University of California—Berkeley	4.8
3. California Institute of Technology	4.7
3. University of Minnesota—Twin Cities	4.7
5. Stanford University (CA)	4.5
5. University of Wisconsin—Madison	4.5
7. University of Texas—Austin (Cockrell)	4.4
8. Princeton University (NJ)	4.3
9. University of California—Santa Barbara	4.2
9. University of Delaware	4.2

**CIVIL**

1. University of California—Berkeley	4.7
2. University of Illinois—Urbana-Champaign	4.6
3. Massachusetts Institute of Technology	4.4
3. Stanford University (CA)	4.4
3. University of Texas—Austin (Cockrell)	4.4
6. Georgia Institute of Technology	4.3
7. Purdue University—West Lafayette (IN)	4.1
7. University of Michigan—Ann Arbor	4.1
7. Virginia Tech	4.1
10. Cornell University (NY)	4.0

**COMPUTER**

1. Massachusetts Institute of Technology	4.9
1. Stanford University (CA)	4.9
1. University of California—Berkeley	4.9
4. Carnegie Mellon University (PA)	4.8
5. University of Illinois—Urbana-Champaign	4.6
6. University of Michigan—Ann Arbor	4.4
7. California Institute of Technology	4.3
7. Georgia Institute of Technology	4.3
9. Cornell University (NY)	4.1
9. University of Texas—Austin (Cockrell)	4.1

Rank/School Average assessment score (5.0=highest)

**ELECTRICAL/ELECTRONIC/COMMUNICATIONS**

1. Massachusetts Institute of Technology	4.9
1. Stanford University (CA)	4.9
1. University of California—Berkeley	4.9
4. University of Illinois—Urbana-Champaign	4.7
5. California Institute of Technology	4.6
6. Georgia Institute of Technology	4.4
7. Carnegie Mellon University (PA)	4.3
7. University of Michigan—Ann Arbor	4.3
9. Cornell University (NY)	4.2
10. Purdue University—West Lafayette (IN)	4.1
10. University of Texas—Austin (Cockrell)	4.1

**ENVIRONMENTAL/ENVIRONMENTAL HEALTH**

1. Stanford University (CA)	4.6
1. University of California—Berkeley	4.6
3. University of Illinois—Urbana-Champaign	4.3
4. University of Texas—Austin (Cockrell)	4.2
5. Georgia Institute of Technology	4.1
6. Carnegie Mellon University (PA)	4.0
6. Johns Hopkins University (Whiting) (MD)	4.0
6. University of Michigan—Ann Arbor	4.0
9. California Institute of Technology	3.8
9. Massachusetts Institute of Technology	3.8
9. University of North Carolina—Chapel Hill	3.8
9. Virginia Tech	3.8

**INDUSTRIAL/MANUFACTURING**

1. Georgia Institute of Technology	4.9
2. University of California—Berkeley	4.5
2. University of Michigan—Ann Arbor	4.5
4. Virginia Tech	4.2
5. Northwestern University (McCormick) (IL)	4.1
5. Pennsylvania State University—University Park	4.1
5. Stanford University (CA)	4.1
8. Cornell University (NY)	4.0
8. Texas A&M University—College Station (Look)	4.0
10. University of Wisconsin—Madison	3.9

**MATERIALS**

1. Massachusetts Institute of Technology	4.8
2. Northwestern University (McCormick) (IL)	4.6
2. University of Illinois—Urbana-Champaign	4.6
4. University of California—Santa Barbara	4.5
5. University of California—Berkeley	4.4
6. Stanford University (CA)	4.2
6. University of Michigan—Ann Arbor	4.2
8. Georgia Institute of Technology	4.1
8. Pennsylvania State University—University Park	4.1
10. University of Florida	4.0

**MECHANICAL**

1. Massachusetts Institute of Technology	4.9
2. Stanford University (CA)	4.8
3. University of California—Berkeley	4.7
4. California Institute of Technology	4.6
5. University of Michigan—Ann Arbor	4.5
6. Georgia Institute of Technology	4.4
6. University of Illinois—Urbana-Champaign	4.4
8. Purdue University—West Lafayette (IN)	4.2
9. Cornell University (NY)	4.1
10. Princeton University (NJ)	4.0

**NUCLEAR**

1. University of Michigan—Ann Arbor	4.8
2. Massachusetts Institute of Technology	4.5
3. Texas A&M University—College Station (Look)	4.3
3. University of Wisconsin—Madison	4.3
5. North Carolina State University	3.8
5. University of California—Berkeley	3.8
7. Pennsylvania State University—University Park	3.6
8. Georgia Institute of Technology	3.3
8. University of Florida	3.3
10. Oregon State University	3.1

METHODOLOGY

Programs at the 198 engineering schools that grant doctoral degrees were surveyed; 189 responded; 189 were eligible to be included in the rankings based on a weighted average of the 10 indicators described below. (All schools are listed in the directory, beginning on Page 129.)

**Quality assessment** (weighted by .40): Two surveys were conducted in fall 2008. Engineering school deans and deans of graduate studies at engineering schools were each asked to rate program quality from marginal (1) to outstanding (5); 55 percent responded. The resulting score is weighted by .25. Corporate recruiters and company contacts who hire engineers with graduate degrees from previously ranked engineering schools were also asked to rate programs; 28 percent responded. The two most recent years' corporate recruiter surveys were averaged and are weighted by .15.

**Student selectivity** (.10): The strength of master's and Ph.D. students entering in fall 2008 was measured by mean GRE quantitative score (67.5 percent) and acceptance rate (32.5 percent).

**Faculty resources** (.25): Based on the 2008 ratio of full-time doctoral students to full-time faculty (30 percent) and full-time master's students to full-time faculty (15 percent); the proportion of full-time faculty who were members of the National Academy of Engineering in 2008 (30 percent); and the number of engineering doctoral degrees granted in the past school year (25 percent).

**Research activity** (.25): Based on total externally funded engineering research expenditures (60 percent) and research dollars per full-time tenured and tenure-track engineering faculty member (40 percent). Expenditures refer to separately funded research, public and private, conducted by the school, averaged over fiscal years 2007 and 2008.

Overall rank: Data were standardized about their means, and standardized scores were weighted, totaled, and rescaled so that the top-scoring school received 100; others received their percentage of the top score.

**Specialty rankings:** These rankings are based solely on assessments by department heads in each specialty area. They rated the other schools that offered the specialty on a 5-point scale. Those schools with the highest average scores appear here. Names of the department heads surveyed came from the American Society for Engineering Education.