

# Schools of Engineering

## THE TOP SCHOOLS

Rank/School	Overall score	Peer assessment score (5.0=highest)	Recruiter assessment score (5.0=highest)	'07 average quantitative GRE score	'07 acceptance rate	'07 Ph.D. students/faculty	'07 faculty membership in National Academy of Engineering	'07 engineering school research expenditures (in millions)	'07 research expenditures per faculty member (in thousands)	Ph.D.'s granted 2006-2007	'07 total graduate engineering enrollment
1. Massachusetts Institute of Technology	100	4.9	4.8	777	23.5%	4.2	12.7%	\$237.7	\$642.5	328	2,636
2. Stanford University (CA)	98	4.8	4.7	780	28.0%	6.7	17.5%	\$152.3	\$735.6	276	3,229
3. University of California–Berkeley	89	4.8	4.6	772	20.4%	5.9	19.8%	\$120.3	\$507.6	223	1,780
4. Georgia Institute of Technology	86	4.5	4.4	767	36.8%	4.1	4.8%	\$219.4	\$458.0	366	4,303
5. University of Illinois–Urbana-Champaign	83	4.5	4.4	774	19.2%	4.1	3.9%	\$195.2	\$482.0	270	2,479
6. California Institute of Technology	81	4.7	4.6	800	13.1%	4.6	9.1%	\$84.9	\$894.2	112	536
7. Carnegie Mellon University (PA)	79	4.2	4.3	765	21.8%	4.4	9.1%	\$161.5	\$744.4	137	1,698
8. University of Southern California (Viterbi)	77	3.5	3.6	753	46.6%	5.3	17.1%	\$165.0	\$993.7	144	3,945
9. Cornell University (NY)	75	4.3	4.2	775	19.8%	4.3	10.9%	\$108.0	\$562.3	128	1,378
University of Michigan–Ann Arbor	75	4.4	4.1	770	36.4%	3.9	3.8%	\$147.8	\$473.6	255	2,416
11. University of California–San Diego (Jacobs)	72	3.7	3.9	765	25.0%	4.7	9.7%	\$141.0	\$834.2	132	1,213
University of Texas–Austin (Cockrell)	72	4.2	4.0	759	22.5%	3.4	8.6%	\$135.2	\$565.8	191	2,100
13. Texas A&M University–College Station (Look)	69	3.7	3.8	756	37.2%	2.6	2.9%	\$205.7	\$699.7	173	2,428
University of California–Los Angeles (Samueli)	69	3.8	3.9	768	36.0%	5.2	14.1%	\$86.3	\$567.7	157	1,388
15. Purdue University–West Lafayette (IN)	68	4.1	4.3	751	32.5%	3.5	3.7%	\$133.8	\$399.5	228	2,323
University of Wisconsin–Madison	68	4.1	3.9	781	23.5%	3.5	3.9%	\$125.6	\$570.9	139	1,524
17. University of Maryland–College Park (Clark)	66	3.7	3.6	758	22.5%	3.8	6.4%	\$136.1	\$594.1	182	1,862
18. Princeton University (NJ)	65	4.1	4.0	783	16.5%	4.0	13.0%	\$52.9	\$434.0	88	519
19. University of California–Santa Barbara	64	3.5	3.6	773	28.3%	4.2	15.3%	\$92.3	\$688.8	95	724
20. Northwestern University (McCormick) (IL)	63	3.9	4.0	779	28.1%	3.9	5.0%	\$97.1	\$542.3	110	1,255
21. Columbia University (Fu Foundation) (NY)	62	3.6	3.5	775	27.6%	4.2	10.9%	\$87.2	\$636.7	93	1,433
22. Harvard University (MA)	60	3.5	3.7	775	13.0%	5.5	14.3%	\$37.9	\$642.4	47	355
23. Pennsylvania State University–University Park	58	3.8	3.8	752	31.9%	3.2	0.9%	\$111.6	\$353.2	167	1,720
24. University of Florida	57	3.4	3.6	758	39.6%	4.4	2.5%	\$108.1	\$376.8	187	2,474
University of Minnesota–Twin Cities	57	3.7	3.6	766	32.8%	4.0	5.4%	\$84.1	\$398.6	144	1,790
University of Washington	57	3.7	3.6	736	28.8%	3.8	4.9%	\$97.4	\$502.0	111	1,423
27. Johns Hopkins University (Whiting) (MD)	56	3.9	3.9	768	24.4%	4.5	2.3%	\$56.9	\$421.6	69	2,661
28. Virginia Tech	55	3.7	3.8	749	21.6%	2.6	2.3%	\$107.3	\$310.9	139	1,807
29. Ohio State University	54	3.5	3.5	762	37.4%	2.9	2.4%	\$113.4	\$448.4	119	1,347
30. North Carolina State University	53	3.4	3.5	756	26.6%	2.9	3.8%	\$104.4	\$341.3	138	2,125
University of Pennsylvania	53	3.5	3.5	759	35.0%	3.8	7.7%	\$51.1	\$527.0	69	1,111
32. Rensselaer Polytechnic Institute (NY)	52	3.5	3.8	752	31.1%	3.0	3.7%	\$85.2	\$535.8	114	1,052
University of California–Davis	52	3.4	3.6	749	35.6%	4.3	5.5%	\$68.3	\$369.4	111	1,124
University of Rochester (NY)	52	2.7	2.9	769	15.5%	3.8	3.7%	\$91.7	\$1,104.9	46	451
35. Duke University (NC)	51	3.5	3.5	767	34.1%	3.6	1.8%	\$63.6	\$558.3	63	648
Rice University (Brown) (TX)	51	3.6	3.7	768	15.2%	4.2	5.5%	\$34.8	\$328.8	56	521
37. University of California–Irvine (Samueli)	50	3.1	3.5	758	25.8%	4.1	5.5%	\$66.2	\$427.1	92	984
38. University of Virginia	48	3.3	3.4	749	19.4%	3.4	6.6%	\$55.3	\$397.6	72	737
39. University of Colorado–Boulder	46	3.2	3.3	757	57.6%	3.5	6.3%	\$51.3	\$332.9	92	1,298
Yale University (CT)	46	3.3	3.4	772	14.8%	2.8	10.2%	\$20.8	\$269.6	20	172
41. Iowa State University	45	3.2	3.5	759	21.9%	2.5	1.0%	\$65.4	\$319.1	82	956
42. Lehigh University (Rossin) (PA)	44	3.0	3.5	767	22.1%	3.2	9.3%	\$33.0	\$287.0	43	568
Vanderbilt University (TN)	44	3.1	3.3	754	12.5%	3.9	1.2%	\$46.4	\$566.0	39	406
44. Boston University	43	2.8	3.0	763	26.3%	3.3	4.0%	\$70.2	\$579.8	68	664
45. Arizona State University (Fulton)	42	3.0	3.2	763	51.2%	3.2	3.1%	\$53.4	\$279.4	109	2,019
46. University of Delaware	41	2.9	3.3	748	27.4%	3.6	3.3%	\$43.9	\$369.2	70	629
Washington University in St. Louis (Sever)	41	3.2	3.5	768	14.7%	3.1	2.2%	\$19.7	\$223.4	42	759
48. University of Pittsburgh	40	2.9	3.3	731	35.8%	2.6	1.6%	\$62.1	\$517.6	49	641
49. Case Western Reserve University (OH)	39	3.2	3.5	732	34.2%	2.2	1.8%	\$36.7	\$319.3	48	612
University of Massachusetts–Amherst	39	2.9	3.3	760	22.4%	3.0	N/A	\$45.0	\$308.0	71	665
University of Notre Dame (IN)	39	3.1	3.5	763	20.8%	3.6	1.0%	\$18.4	\$187.8	56	401

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

SPECIALTIES

METHODOLOGY

PROGRAMS RANKED BEST BY ENGINEERING SCHOOL DEPARTMENT HEADS

Rank/School	Average assessment score (5.0=highest)
<b>AEROSPACE/AERONAUTICAL/ASTRONAUTICAL</b>	
1. Massachusetts Institute of Technology	4.7
2. California Institute of Technology	4.6
Stanford University (CA)	4.6
4. Georgia Institute of Technology	4.3
5. Purdue University–West Lafayette (IN)	4.1
University of Michigan–Ann Arbor	4.1
7. University of Illinois–Urbana-Champaign	4.0
8. Cornell University (NY)	3.7
Princeton University (NJ)	3.7
Texas A&M University–College Station (Look)	3.7
University of Maryland–College Park (Clark)	3.7
University of Texas–Austin (Cockrell)	3.7
<b>BIOMEDICAL/BIOENGINEERING</b>	
1. Johns Hopkins University (Whiting) (MD)	4.7
2. Georgia Institute of Technology	4.6
University of California–San Diego (Jacobs)	4.6
4. Duke University (NC)	4.5
5. University of Washington	4.3
6. Massachusetts Institute of Technology	4.2
7. Boston University	4.0
University of Pennsylvania	4.0
9. Case Western Reserve University (OH)	3.9
Rice University (Brown) (TX)	3.9
<b>CHEMICAL</b>	
1. California Institute of Technology	4.8
Massachusetts Institute of Technology	4.8
University of California–Berkeley	4.8
4. University of Minnesota–Twin Cities	4.7
5. Stanford University (CA)	4.5
University of Wisconsin–Madison	4.5
7. Princeton University (NJ)	4.4
8. University of Texas–Austin (Cockrell)	4.3
9. University of California–Santa Barbara	4.2
10. University of Delaware	4.1
University of Illinois–Urbana-Champaign	4.1
<b>CIVIL</b>	
1. University of California–Berkeley	4.7
University of Illinois–Urbana-Champaign	4.7
3. Stanford University (CA)	4.5
4. Massachusetts Institute of Technology	4.4
University of Texas–Austin (Cockrell)	4.4
6. Georgia Institute of Technology	4.3
7. Purdue University–West Lafayette (IN)	4.2
8. California Institute of Technology	4.1
University of Michigan–Ann Arbor	4.1
10. Cornell University (NY)	4.0
Virginia Tech	4.0
<b>COMPUTER</b>	
1. Massachusetts Institute of Technology	4.9
2. Stanford University (CA)	4.8
University of California–Berkeley	4.8
4. Carnegie Mellon University (PA)	4.7
5. University of Illinois–Urbana-Champaign	4.6
6. University of Michigan–Ann Arbor	4.5
7. California Institute of Technology	4.2
Georgia Institute of Technology	4.2
9. University of Texas–Austin (Cockrell)	4.1
10. Cornell University (NY)	4.0
Princeton University (NJ)	4.0
Purdue University–West Lafayette (IN)	4.0
<b>ELECTRICAL/ELECTRONIC/COMMUNICATIONS</b>	
1. Massachusetts Institute of Technology	5.0
2. Stanford University (CA)	4.9
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	4.5
University of Michigan–Ann Arbor	4.5

Rank/School	Average assessment score (5.0=highest)
8. Carnegie Mellon University (PA)	4.3
9. Cornell University (NY)	4.2
10. Princeton University (NJ)	4.1
Purdue University–West Lafayette (IN)	4.1
<b>ENVIRONMENTAL/ENVIRONMENTAL HEALTH</b>	
1. Stanford University (CA)	4.6
2. University of California–Berkeley	4.5
3. University of Illinois–Urbana-Champaign	4.3
4. University of Texas–Austin (Cockrell)	4.2
5. University of Michigan–Ann Arbor	4.1
6. Georgia Institute of Technology	4.0
Johns Hopkins University (Whiting) (MD)	4.0
8. California Institute of Technology	3.9
Carnegie Mellon University (PA)	3.9
10. Massachusetts Institute of Technology	3.8
University of North Carolina–Chapel Hill	3.8
Virginia Tech	3.8
<b>INDUSTRIAL/MANUFACTURING</b>	
1. Georgia Institute of Technology	4.8
2. University of Michigan–Ann Arbor	4.4
3. University of California–Berkeley	4.3
4. Stanford University (CA)	4.1
5. Northwestern University (McCormick) (IL)	4.0
Pennsylvania State University–University Park	4.0
7. Virginia Tech	3.9
8. Purdue University–West Lafayette (IN)	3.8
9. Cornell University (NY)	3.7
Texas A&M University–College Station (Look)	3.7
University of Wisconsin–Madison	3.7
<b>MATERIALS</b>	
1. Massachusetts Institute of Technology	4.8
2. University of Illinois–Urbana-Champaign	4.6
3. Northwestern University (McCormick) (IL)	4.5
University of California–Berkeley	4.5
5. University of California–Santa Barbara	4.4
6. Stanford University (CA)	4.3
7. University of Michigan–Ann Arbor	4.2
8. Georgia Institute of Technology	4.1
University of Florida	4.1
10. Cornell University (NY)	4.0
Pennsylvania State University–University Park	4.0
<b>MECHANICAL</b>	
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
University of Michigan–Ann Arbor	4.6
6. University of Illinois–Urbana-Champaign	4.5
7. Georgia Institute of Technology	4.4
Purdue University–West Lafayette (IN)	4.4
9. Cornell University (NY)	4.2
10. Princeton University (NJ)	4.0
University of Texas–Austin (Cockrell)	4.0
<b>NUCLEAR</b>	
1. University of Michigan–Ann Arbor	4.5
2. Massachusetts Institute of Technology	4.2
University of Wisconsin–Madison	4.2
4. Texas A&M University–College Station (Look)	3.9
5. Pennsylvania State University–University Park	3.8
University of California–Berkeley	3.8
<b>PETROLEUM</b>	
1. University of Texas–Austin (Cockrell)	4.6
2. Stanford University (CA)	4.2
Texas A&M University–College Station (Look)	4.2
4. University of Tulsa (OK)	4.0
5. Colorado School of Mines	3.4
Pennsylvania State University–University Park	3.4
University of Oklahoma	3.4

Programs at the 198 engineering schools that grant doctoral degrees were surveyed; 193 responded; 192 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 2007. Engineering school deans and deans of graduate studies at engineering schools were each asked to rate program quality from marginal (1) to outstanding (5); 59 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; 29 percent responded. Their opinions are weighted by .15.

**Student selectivity** (.10): The strength of master's and Ph.D. students entering in fall 2007 was measured by mean GRE quantitative score (67.5 percent) and acceptance rate (32.5 percent).

**Faculty resources** (.25): Based on the 2007 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 2007 (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 2006 and 2007.

**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. Department heads in their specialty area 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 who were surveyed came from the American Society for Engineering Education.