Best Undergraduate Engineering Programs

On these pages, U.S. News ranks undergraduate engineering programs accredited by ABET, formerly known as the Accreditation Board for Engineering and Technology. The rankings are based solely on a survey of engineering deans and senior faculty conducted during the spring of 2010. Surveys sent to the dean and a faculty member at each program asked them to rate programs with which they're familiar on a scale from 1 (marginal) to 5 (distinguished). Students who prefer a school

that focuses on its undergrads can use the list below of top institutions whose terminal degree is a bachelor's or master's; universities offering doctorates, which can mean a wider range of offerings at the undergraduate level, appear on the next page. Thirty-seven percent of those surveyed returned ratings of the group below; 58 percent did so for the doctorate group. Respondents were also asked to name 10 top programs in specialty areas; those mentioned most often appear here.

Rest Programs at Engineering Schools whose Highest Degree IS A BACHELOR'S OR MASTER'S

Rank School (State) (*Public)	Peer assessment score (5.0=highest)	Rank School (State) (*Public)	Peer assessment score (5.0=highest)		Peer essment score highest)
1. Rose-Hulman Inst. of Tech. (IN) 4.5	17. Embry-Riddle Aero. UPrescott	(AZ) 3.3	3 San Jose State University (CA)*	3.1
2. Harvey Mudd College (CA)	4.4	17. Gonzaga University (WA)	(34)	81. St. Louis University	3.1
3. Cooper Union (NY)	4.1	17. Santa Clara University (CA)		31. University of Michigan-Dearborn*	3.1
3. United States Military Acade	my (NY)* 4.1	17. Union College (NY)	3.3	31. Valparaiso University (IN)	3.1
5. Calif. Polytech. St. USan Lu	is Obispo* 4.0	21. The Citadel (SC)*	3.2	31. Webb Institute (NY)	3.1
5. United States Air Force Acad	i. (CO)* 4.0	21. Kettering University (Min	3.2	38. Celifornia State ULos Angeles*	3.0
5. United States Naval Academ	y (MD)* 4.0	21. Lafayette College (PA)	3.2	38. Manhattan College (NY)	3.0
8. Franklin W. Olin Cot. of Eng. (MA) 3.9	21. Rowan University (AC*	8.2	38. Miami University-Oxford (OH)*	3.0
9. Bucknell University (PA)	3.7	21. Smith College (M.)	3.2	38. University of Portland (OR)	3.0
9. Villanova University (PA)	3.7	21. Trinity University (TX)	3.2	42. Boise State University (ID)*	29
11. Baylor University (TX)	3.5	21. U.S. Me chant Marine Acad. (NY	')* 3.2	42. California State USacramento*	2.9
11. Calif. State Poly. UnivPomo	ne* 3.5	21, Universitatio Colorado Springs	* 3.2	42. Maine Maritime Academy*	2.9
11. Embry-Riddle Aeronautical L	J. (FL) 3.5	21. Valversity of San Diego	3.2	42. Norwich University (VT)	2.9
11. Milwaukee School of Engine	ering 3.5 🛦	2L Vilainia Military Institute*	3.2	42. Oregon Inst: of Technology*	2.9
11. Swarthmore College (PA)	3.5	31. Bradley University (IL)	3.1	42. Purdue University-Calumet (IN)*	2.9
11. United States Coast Guard A	ced. (CT)* 36	35 Loyola Marymount University (C	A) 3.1	42. Univ. of Massachusetts-Dartmouth*	2.9

Best in the Specialtie

AEROSPACE/AERONAUTICAL/ASTRONAUTICAL

- 1. Embry-Riddle Aeronautical U. (FL)
- 2. United States Air Force Acad. (CO)*
- 3. Embry-Riddle Aeronautical U.-Prescott (AZ)
- 4. Calif. Polytechnic St. U.-San Luis Obispo*
- 5. United States Naval Academy (MD)* CHEMICAL
- 1. Rose-Hulman Inst. of Tech. (IN)
- Rowan University (NJ)*
- 3. Cooper Union (NY)
- 4. Bucknell University (PA)
- 5. Manhattan College (NY)

- 1. Rose-Hulman Inst. of Tech. (IN)
- United States Military Academy (NY)*
- 3. Bucknell University (PA)
- 4. Calif. Polytechnic St. U.-San Luis Obispo*
- 5. Cooper Union (NY)
- 5. Harvey Mudd College (CA)

COMPUTER ENGINEERING

- 1. Rose-Hulman Inst. of Tech. (IN)
- 2. Calif. Polytechnic St. U.-San Luis Obispo*
- 3. Bucknell University (PA)
- 4. Cooper Union (NY)

ELECTRICAL/ELECTRONIC/COMMUNICATIONS

- 1. Rose-Hulman Inst. of Tech. (IN)
- 2. Calif. Polytechnic St. U.-San Luis Obispo*
- 3. Cooper Union (NY)
- 3. United States Military Academy (NY)*
- 5. United States Naval Academy (MD)*

MECHANICAL

- 1. Rose-Hulman Inst. of Tech. (IN)
- 2. Calif. Polytechnic St. U.-San Luis Obispo*
- 2. Kettering University (MI)
- 2. United States Military Academy (NY)*
- 5. Harvey Mudd College (CA)

Note: Peer assessment survey conducted by Synovate. To be ranked in a specialty, a school may have either a program or course offerings in that subject area. Based on a recommendation from the American Society for Engineering Education, a few engineering schools with small doctoral programs are part of the bachelor's and master's category.

Best Programs at engineering schools whose highest degree is a doctorate

1. Massachusetts Inst. of Technology	4.8
2. Stanford University (CA)	4.7
3. University of California-Berkeley*	4.6
4. California Institute of Technology	4.5
4. Georgia Institute of Technology*	4.5
6. U. of Illinois-Urbana-Champaign*	4.4
7. University of Michigan-Ann Arbor*	4.3
8. Carnegie Mellon University (PA)	4.2
8. Cornell University (NY)	4.2
8. Purdue UnivWest Lafayette (IN)*	4.2
11. Princeton University (NJ)	4.1
11. University of Texas-Austin*	4.1
13. Johns Hopkins University (MD)	3.9
13. Northwestern University (IL)	3.9
13. Univ. of Wisconsin-Madison*	3.9
13. Virginia Tech*	3.9
17. Pennsylvania State UUniversity Park*	3.8
17. Texas A&M UnivCollege Station*	3.8
19. Rice University (TX)	3.7
19. Univ. of California-Los Angeles*	3.7
19. Univ. of Maryland-College Park*	3.7
22. Duke University (NC)	3.6
22. Univ. of California-San Diego*	3.6
22. Univ. of Minnesota-Twin Cities*	3.6
22. University of Washington*	3.6
26. Columbia University (NY)	3.5

assessi	core
26. Harvard University (MA)	3.5
26. North Carolina State URaleigh*	3.5
26. Ohio State University-Columbus*	3.5
26. Rensselaer Polytechnic Inst. (NY)	3.5
26. Univ. of Southern California	3.5
32. University of California-Davis*	3.4
32. University of Colorado-Boulder*	3.4
32. University of Florida*	3.4
32. University of Pennsylvania	3.4
36. Lehigh University (PA)	3.3
36. Univ. of California-Santa Barbara*	3.3
36. University of Virginia*	3.3
36. Vanderbilt University (TN)	3.3
40. Brown University (RI)	3.2
40. Case Western Reserve Univ. (OH)	3.2
40. Iowa State University*	3.2
40. Michigan State University*	3.2
40. Yale University (CT)	3.2
45. Arizona State University*	3.1
45. Dartmouth College (NH)	3.1
45. Rutgers, St. U. of N.JNew Brunswick*	
45. University of Arizona*	3.1
45. University of California-Irvine*	3.1
45. University of Notre Dame (IN)	3.1
45. Washington University in St. Louis	3.1
52. Colorado School of Mines*	3.0

Rank School (State) (*Public)	Peer assessment score (5.0=highest)
52. Drexel University (PA)	3.0
52. University of Delaware*	3.0
52. Univ. of Massachusetts-Amhers	t* 3.0
56. Auburn University (AL)*	2.9
56. Boston University	2.9
56. Clemson University (SC)*	2.9
56. Colorado State University*	2.9
56. Northeastern University (MA)	2.9
56. Tufts University (MA)	2.9
56. University of Iowa*	2.9
56. University of Pittsburgh*	2.9
56. Worcester Polytechnic Inst. (MA) 2.9
65. Illinois Institute of Technology	2.8
65. Rochester Inst. of Technology (N	NY) 2.8
65. SUNY-Stony Brook*	2.8
65. Syracuse University (NY)	2.8
65. University at Buffalo-SUNY*	2.8
65. University of Illinois-Chicago*	2.8
65. University of Tennessee*	2.8
65. University of Utah*	2.8
65. Washington State University*	2.8
74. Kansas State University*	2.7
74. Michigan Technological Universit	ty* 2.7
74. Missouri Univ. of Science & Tech	nnology*2.7
74. University of Rochester (NY)	2.7

Best in the Specialties

(*Public)

AEROSPACE/AERONAUTICAL/ASTRONAUTICAL W CIVIL

- 1. Massachusetts Inst. of Technology
- 2. Georgia Institute of Technology*
- 3. University of Michigan-Ann Arbor'
- 4. Purdue Univ.-West Lafayette (IN)*
- 5. California Institute of Technology **BIOLOGICAL/AGRICULTURAL**
- 1. Texas A&M Univ.-College Station*
- 2. U. of Illinois-Urbana-Champaign*
- 3. Purdue Univ.-West Lafayette (IN)*
- 4. Iowa State University*
- 5. Cornell University (NY)

BIOMEDICAL/BIOMEDICAL ENGINEERING

- 1. Johns Hopkins University (MD)
- 2. Duke University (NC)
- 3. Georgia Institute of Technology*
- 4. Massachusetts Inst. of Technology
- 5. Univ. of California-San Diego* CHEMICAL
- 1. Massachusetts Inst. of Technology
- 2. University of California-Berkeley*
- 3. Stanford University (CA)
- 3. Univ. of Minnesota-Twin Cities*
- 5. University of Texas-Austin*
- 5. Univ. of Wisconsin-Madison*

- 1. U. of Illinois-Urbana-Champaign*
- 2. University of California-Berkeley*
- 3. Georgia Institute of Technology*
- 4. University of Texas-Austin*
- 5. Purdue Univ.-West Lafayette (IN)*

COMPUTER ENGINEERING

- 1. Massachusetts Inst. of Technology
- 2. Carnegie Mellon University (PA)
- 3. Stanford University (CA)
- 3. U. of Illinois-Urbana-Champaign*
- 5. University of California-Berkeley*

ELECTRICAL/ELECTRONIC/COMMUNICATIONS

- 1. Massachusetts Inst. of Technology
- 2. Stanford University (CA)
- 3. U. of Illinois-Urbana-Champaign*
- 4. University of California-Berkeley*
- 5. Georgia Institute of Technology*

ENGINEERING SCIENCE/ENGINEERING PHYSICS

- 1. California Institute of Technology
- 2. U. of Illinois-Urbana-Champaign*
- 3. Cornell University (NY)
- 4. University of California-Berkeley*
- 5. Virginia Tech*

ENVIRONMENTAL/ENVIRONMENTAL HEALTH

- 1. Stanford University (CA)
- 1. University of California-Berkeley*
- 3. U. of Illinois-Urbana-Champaign*
- 4. University of Texas-Austin*
- 5. Georgia Institute of Technology*
- 5. Massachusetts Inst. of Technology

INDUSTRIAL/MANUFACTURING

- 1. Georgia Institute of Technology*
- 2. University of Michigan-Ann Arbor*
- 3. Purdue Univ.-West Lafayette (IN)*
- 4. University of California-Berkeley*
- 4. Virginia Tech*

MATERIALS

- 1. Massachusetts Inst. of Technology
- 2. U. of Illinois-Urbana-Champaign*
- 3. University of California-Berkeley*
- 4. Northwestern University (IL)
- 5. University of Michigan-Ann Arbor* MECHANICAL
- 1. Massachusetts Inst. of Technology
- 2. University of California-Berkeley*
- 3. Georgia Institute of Technology*
- 4. Stanford University (CA)
- 5. University of Michigan-Ann Arbor*

Schools of Engineering

Rank	(School	Overall score	Peer assessment score (5.0=highest)	Recruiter assessment score (5.0=highest)	'09 average quantitative GRE score	'09 accept- ance rate	'09 Ph.D. students/ faculty	'09 faculty membership in National Academy of Engineering	'09 engineering school research expenditures (in millions)	y '09 research expenditures per faculty member (in thousands)	granted 2008-	'09 total graduate engineering enrollment
1	Massachusetts Institute of Technology	100	4.9	4.9	780	17.9%		12.7%	\$266.3	\$727.5	302	2,702
2.	Stanford University (CA)	98	4.8	4.7	777	27.6%	7.4	17.6%	\$175.8	\$806.3	247	3,399
	University of California-Berkeley	90	4.8	4.5	776	14.0%	5.7	17.7%	\$161.5	\$651.3	268	1,768
	Georgia Institute of Technology	86	4.5	4.4	772	31.3%	4.2	4.3%	\$257.3	\$514.6	363	4,530
	University of Illinois-Urbana-Champaign	81	4.6	4.4	770	20.3%	4.2	4.0%	\$208.1	\$512.5	256	2,663
	Carnegie Mellon University (PA)	79	4.3	4.3	759	29.1%	4.7	9.8%	\$170.6	\$779.0	171	2,240
	California Institute of Technology	76	4.7	4.6	800	13.0%	5.1	8.7%	\$68.1	\$702.1	81	532
	University of Michigan–Ann Arbor	75	4.5	4.2	773	32.5%	4.0	4.0%	\$164.3	\$494.8	263	2.660
	University of Texas-Austin (Cockrell)	74	4.2	4.0	765	21.5%	4.0	7.6%	\$173.7	\$588.8	207	2,450
	Cornell University (NY)	72	4.3	4.2	774	33.6%	4.4	9.8%	\$123.0	\$621.4	137	1.610
	University of Southern California (Viterbi)	72	3.5	3.6	758	44.2%	5.2	8.9%	\$162.3	\$989.5	163	4.144
	Texas A&M University-College Station (Look)		3.8	3.7	754	32.8%	2.9	2.8%	\$248.4	\$750.5	190	2,906
	Purdue University-West Lafayette (IN)	69	4.2	4.1	763	31.1%	4.0	4.6%	\$157.2	\$456.9	227	2,625
	University of California-San Diego (Jacobs)	69	3.8	3.8	775	27.8%	4.7	9.4%	\$133.4	\$737.0	132	1,345
	University of California-Los Angeles (Samuel	i) 67	3.8	3.8	765	38.9%	5.6	13.5%	\$93.3	\$622.2	143	1,635
	University of Wisconsin–Madison	67	4.0	4.0	780	17.6%	4.1	4.1%	\$140.4	\$629.5	144	1,750
	Princeton University (NJ)	65	4.1	4.1	783	13.7%	3.9	13.4%	\$63.3	\$494.3	90	517
	Columbia University (Fu Foundation) (NY)	64	3.6	3.7	774	34.2%	4.3	13.1%	\$110.8	\$774.8	94	1.841
	Harvard University (MA)	63	3.6	3.9	770	10.5%	5.8	19.3%	\$39.2	\$699.3	46	356
	University of California-Santa Barbara	63	3.6	3.7	765	21.7%	3.9	14.4%	\$100.2	\$726.1	90	671
	Northwestern University (McCormick) (IL)	62	4.0	3.8	776	30.6%	4.2	5.1%	\$107.8	\$598.9	100	1,343
	University of Maryland-College Park (Clark)	61	3.6	3.7	757	24.0%	4.1	2.2%	\$154.0	\$652.7	147	1.895
	Pennsylvania State University-University Park		3.9	3.8	768	28.9%	3.0	0.6%	\$126.9	\$386.9	164	1,665
	University of Pennsylvania	57	3.6	3.6	757	30.2%	4.0	7.5%	\$78.4	\$746.2	74	1,244
	Johns Hopkins University (Whiting) (MD)	56	4.0	4.0	766	36.8%	4.4	2.1%	\$64.0	\$470.5	90	2.825
	Ohio State University	56	3.6	3.6	765	24.6%	3.4	2.8%	\$128.1	\$516.5	143	1,587
	Virginia Tech	56	3.8	3.9	744	20.3%	2.8	2.7%	\$121.2	\$341.5	154	2.032
	University of Minnesota—Twin Cities	55	3.7	3.7	761	35.1%	4.3	4.8%	\$95.2	\$453.1	92	1,878
	University of Washington	55	3.7	3.7		31.5%	3.8	6.0%	\$96.8	\$463.1	100	1,541
	North Carolina State University	53	3.4	3.4	756	17.8%	2.8	3.6%	\$128.5	\$428.4	157	2,399
	University of Florida	53	3.5	3.5	763	44.8%	4.5	0.7%	\$103.9	\$369.9	180	2,788
	University of California-Davis	52	3.5	3.7	749	29.4%	4.1	5.7%	\$86.3	\$461.6	99	1.146
	Duke University (Pratt) (NC)	51	3.6	3.6	769	23.6%	3.7	1.8%	\$69.9	\$618.6	58	745
	Rice University (Brown) (TX)	51	3.6	3.8	768	17.4%	4.8	5.3%	\$40.8	\$381.4	68	624
	Rensselaer Polytechnic Institute (NY)	49	3.5	4.0	752	28.5%	3.4	2.0%	\$56.7	\$354.6	77	1.054
	University of California-Irvine (Samueli)	47	3.2	3.4	762	23.9%	3.9	3.9%	\$67.5	\$394.9	126	1.054
37.	University of Rochester (NY)	46	2.8	3.0	765	19.7%	3.5	3.4%		\$1,025.1	40	460
	Vanderbilt University (TN)	46	3.2	3.5	756	13.5%	3.9	2.4%	\$54.6	\$682.1	56	398
	University of Colorado-Boulder	45	3.4	3.4	749	56.4%	3.9	4.5%	\$65.2	\$423.2	65	1,476
	University of Virginia	45	3.3	3.4	762	17.6%	3.6	5.1%	\$58.6	\$415.4	63	728
	Yale University (CT)	45	3.3	3.6	780	13.7%	2.8	9.5%	\$23.1	\$355.8	27	184
	Boston University	44	3.0	3.3		35.9%	3.2	5.0%	\$75.6	\$619.7	68	646
	Lehigh University (Rossin) (PA)	44	3.1	3.3		19.7%	5.3	9.8%	\$26.7	\$251.9	41	640
	Arizona State University (Fulton)	42	3.1	3.3		45.1%	3.3	2.6%	\$70.3	\$357.1	125	2,002
	Iowa State University	41	3.2	3.3		17.8%	2.4	1.3%	\$70.7	\$322.8	94	1,004
	University of Delaware	41	3.0	3.4		10.5%	3.9	4.0%	\$41.5	\$334.4	65	689
	Case Western Reserve University (OH)	39	3.2	3.4		31.9%	3.2	1.9%	\$43.2	\$400.2	62	630
	Dartmouth College (Thayer) (NH)	38	3.1	3.4		24.9%	2.8	2.2%	\$20.1	\$428.4	17	262
	University of Pittsburgh (Swanson)	38	2.9	3.2		35.7%	3.1	0.8%	\$68.1	\$527.6	56	838
	Washington University in St. Louis	38	3.2	3.4		33.8%	3.7	2.6%	\$21.7	\$264.6	50	683

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

DEPARTMENT HEADS

Rank/School Average as score (5.0	
6. Georgia Institute of Technology	4.5
7. Carnegie Mellon University (PA)	4.4
7. University of Michigan–Ann Arbor	4.4
Cornell University (NY) Maintain of Taxon Austin (Control)	4.2
9. University of Texas–Austin (Cockrell)	4.2
ENVIRONMENTAL/ENVIRONMENTAL HEALTH	4.7
Stanford University (CA) University of California–Berkeley	4.7
University of California Berkeley University of Illinois Urbana-Champaign	4.5
University of Texas–Austin (Cockrell)	4.4
5. Georgia Institute of Technology	4.3
6. University of Michigan-Ann Arbor	4.2
7. Carnegie Mellon University (PA)	4.1
7. Johns Hopkins University (Whiting) (MD)	4.1
7. Virginia Tech	4.1
10. Massachusetts Institute of Technology	3.9
INDUSTRIAL/MANUFACTURING	4.9
Georgia Institute of Technology University of Michigan–Ann Arbor	4.6
University of Michigan—Ann Albor University of California—Berkeley	4.4
Northwestern University (McCormick) (IL)	4.2
4. Pennsylvania State University-University Park	
4. Stanford University (CA)	4.2
4. Virginia Tech	4.2
8. Cornell University (NY)	4.0
8. Texas A&M University-College Station (Look)	4.0
10. Purdue University–West Lafayette (IN)	3.9
10. University of Wisconsin–Madison	3.9
MATERIALS	4.0
Massachusetts Institute of Technology University of Illinois–Urbana-Champaign	4.9
Northwestern University (McCormick) (IL)	4.6
University of California–Santa Barbara	4.5
5. Stanford University (CA)	4.4
5. University of California-Berkeley	4.4
7. University of Michigan-Ann Arbor	4.2
8. Cornell University (NY)	4.1
Georgia Institute of Technology	4.1
8. Pennsylvania State University–University Park	
8. University of Florida	4.1
MECHANICAL 1. Massachusetts Institute of Technology	5.0
2. Stanford University (CA)	4.8
University of California–Berkeley	4.8
4. California Institute of Technology	4.7
5. University of Michigan-Ann Arbor	4.6
6. Georgia Institute of Technology	4.5
6. University of Illinois-Urbana-Champaign	4.5
8. Cornell University (NY)	4.3
Purdue University–West Lafayette (IN)	4.2
10. Princeton University (NJ)	4.1
NUCLEAR	10
University of Michigan–Ann Arbor University of Wisconsin–Madison	4.8
Massachusetts Institute of Technology	4.4
4. Texas A&M University–College Station (Look)	4.3
5. Pennsylvania State University-University Park	
5. University of California–Berkeley	3.9
7. North Carolina State University	3.8
Georgia Institute of Technology	3.5
9. Oregon State University	3.3
University of Florida University of Tennessee–Knoxville	3.3
5. Onliversity of Territessee-Kiloxville	5.5

Programs at the 198 engineering schools that grant doctoral degrees were surveyed: 192 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 81.) Quality assessment (weighted by .40): Two surveys were conducted in fall 2009. 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 engineer-

are weighted by .15. Student selectivity (.10): The strength of master's and Ph.D. students entering in fall 2009 was measured by mean GRE quantitative score (67.5 percent) and acceptance rate (32.5 percent).

ing schools were also asked to rate

programs; 22 percent responded.

The two most recent years' corporate

recruiter surveys were averaged and

Faculty resources (.25): Based on the 2009 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 2009 (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 2008 and 2009.

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 in 11 engineering disciplines 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.

4.9

4.7

4.6

University of California-Berkeley

California Institute of Technology

University of Illinois-Urbana-Champaign