

**Table B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 2000**

[Dollars in thousands]

Institution and ranking	Total	Aero/ astro- nautical	Bioengin- eering/ Biomed- ical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgical and materials	Other
Total, all institutions .....	4,550,315	252,276	172,023	374,310	595,969	1,112,799	631,910	398,995	1,012,033
1 Johns Hopkins U <sup>1</sup> .....	251,993	24,047 i	10,482 i	6,150 i	5,785 i	73,784 i	50,939 i	772 i	80,034
2 Georgia Institute of Tech .....	197,589	18,481	7,390	5,938	12,455	92,656	23,421	11,127	26,121
3 Pennsylvania State U .....	162,795	2,530	2,576	14,257	10,030	40,265	23,801	38,248	31,088
4 MA Institute of Tech .....	149,282	15,519	13,379	16,106	13,054	25,516	22,146	12,858	30,704
5 University of Michigan .....	136,176	4,520	4,402	3,623	12,400	43,292	25,067	6,158	36,714
6 U CA Berkeley .....	120,757	0	188	4,842	35,073	59,744	129	0	20,781
7 Texas A&M University .....	118,494	5,272	1,893	9,364	40,902	5,737	13,446	3,355	38,525
8 Stanford University .....	107,473	6,020	0	6,424	7,333	25,371	19,725	2,424	40,176
9 U TX at Austin .....	100,294	9,091	2,424	7,469	14,997	27,777	10,940	13,505	14,091
10 U of IL Urbana-Champaign .....	95,353	4,504	1	5,160	14,623	30,180	15,418	12,710	12,757
Total, 1st 10 institutions .....	1,440,206	89,984	42,735	79,333	166,652	424,322	205,032	101,157	330,991
11 Ohio State University .....	82,705	2,622	778	4,962	5,380	10,947	10,012	15,196	32,808
12 NC State University .....	76,839	4,034	6,336	15,382	12,649	12,481	8,534	9,413	8,010
13 U MD at College Park .....	76,091	11,414	0	1,211	6,988	10,206	12,370	5,877	28,025
14 Purdue University .....	71,515	5,389	6,549	6,624	11,799	17,312	9,774	2,170	11,898
15 U WI-Madison .....	71,293	0	428	7,317	4,093	7,052	4,238	3,237	44,928
16 VA Polytech Inst & St U .....	66,963	4,023	643	2,644	14,316	17,432	11,933	3,979	11,993
17 Cornell University .....	54,860	4,089	0	3,020	4,961	18,012	1,301	4,836	18,641
18 University of Arizona .....	48,272	908	1,926	4,933	7,921	15,230	12,482	2,501	2,371
19 University of Florida .....	47,513	2,716	822	5,832	10,750	4,358	2,246	8,658	12,131
20 Iowa State University .....	47,049	1,716	0	1,084	6,330	8,035	1,258	2,086	26,540
Total, 1st 20 institutions .....	2,083,306	126,895	60,217	132,342	251,839	545,387	279,180	159,110	528,336
21 New Mexico State Univ .....	46,790	23,145	0	5,442	1,185	7,357	455	146	9,060
22 U CA San Diego .....	46,660	0	8,248	0	0	21,107	4,340	772	12,193
23 University of Rochester .....	46,494	0	0	1,828	0	2,668	34,701	0	7,297
24 U CA Los Angeles .....	46,434	0	138	3,153	3,020	22,001	14,678	3,156	288
25 U of Southern California .....	46,319	1,667	3,105	1,432	4,989	26,496	1,418	1,823	5,389
26 Northwestern University .....	44,685	0	2,510	4,086	4,108	5,041	3,429	12,488	13,023
27 California Inst of Tech .....	43,320	5,657	0	5,105	1,678	10,004	2,580	1,414	16,882
28 Louisiana State U System .....	41,628	0	0	2,344	6,138	977	3,969	9,456	18,744
29 University of Minnesota .....	41,343	4,168	361	9,057	8,281	7,747	7,797	64	3,868
30 Utah State University .....	41,074	0	0	0	1,188	30,973	4,003	0	4,910
Total, 1st 30 institutions .....	2,528,053	161,532	74,579	164,789	282,426	679,758	356,550	188,429	619,990
31 Princeton University .....	41,026	7,374	0	3,130	3,709	19,022	0	7,083	708
32 U of Washington .....	39,009	2,719	3,326	5,324	8,024	2,614	1,208	15,794	0
33 U CA Santa Barbara .....	38,902	0	180	4,995	0	21,138	2,588	9,848	153
34 Mississippi State U .....	38,107	2,450	0	2,409	1,762	3,852	1,925	0	25,709
35 Carnegie Mellon U .....	36,892	0	0	3,379	2,681	12,141	3,525	4,533	10,633
36 Arizona State University .....	36,612	172	1,408	2,690	8,723	10,469	7,813	0	5,337
37 University of Dayton .....	36,325	2,054	0	520	300	775	11,780	15,568	5,328
38 Clemson University .....	35,374	0	0	1,403	6,070	6,980	4,132	0	16,789
39 U CA Davis .....	35,197	0	5,519	4,081	9,426	4,492	6,066	0	5,613
40 Rutgers the State U NJ .....	33,681	0	4,037	2,073	2,165	6,604	5,420	9,897	3,485
Total, 1st 40 institutions .....	2,899,178	176,301	89,049	194,793	325,286	767,845	401,007	251,152	693,745
41 U of Tennessee System .....	32,928	6,509	0	2,578	12,808	3,080	0	1,605	6,348
42 SUNY at Buffalo .....	32,301	545	456	1,718	11,146	3,677	10,010	0	4,749
43 University of Kentucky .....	31,426	0	0	2,320	353	2,398	2,694	0	23,661
44 Rensselaer Polytech Inst .....	31,036	4	1,303	2,177	3,904	15,042	2,230	2,410	3,966
45 University of Colorado .....	31,022	11,665 i	0 i	3,521 i	6,077	5,874	3,024	127 i	734
46 University of Connecticut .....	27,294	0	0	2,616	9,437	3,535	1,413	9,706	587
47 University of Virginia .....	26,910	331	2,601	2,014	2,744	4,685	5,060	7,349	2,126
48 University of New Mexico .....	26,464	0	0	1,998	5,265	6,531	1,131	9,708	1,831
49 Case Western Reserve U .....	25,518	0	5,047	6,391	689	4,632	4,317	4,328	114
50 University of Utah .....	25,293	0	3,531	6,170	7,085	1,873	1,744	2,977	1,913
Total, 1st 50 institutions .....	3,189,370	195,355	101,987	226,296	384,794	819,172	432,630	289,362	739,774

See explanatory information and SOURCE at end of table.

**Table B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 2000**

[Dollars in thousands]

Institution and ranking	Total	Aero/ astro- nautical	Bioengin- eering/ Biomed- ical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgical and materials	Other
51 University of Cincinnati .....	24,127	2,038	0	1,666	7,765	8,091	2,397	2,049	121
52 Auburn University .....	23,859	1,211	0	6,255	2,670	4,088	2,259	1,462	5,914
53 University of Delaware .....	23,730	0	0	5,890	4,705	5,283	3,637	0	4,215
54 U of South Carolina .....	23,095	0	0	5,961	1,614	10,064	3,602	854	1,000
55 U of Iowa .....	22,921	0	658	1,939	8,182	2,372	3,967	0	5,803
56 U of Nebraska at Lincoln .....	22,365	0	8,011	794	3,697	2,261	1,802	1,187	4,613
57 U of Missouri Columbia .....	21,818	0	0	2,619	4,639	4,282	1,823	3,112	5,343
58 West Virginia University .....	20,560	31	0	1,604	4,998	3,331	8,859	158	1,579
59 U of Missouri Rolla .....	19,698	694	0	196	2,615	3,879	2,579	7,538	2,197
60 Lehigh University .....	19,503	0	0	3,194	5,400	2,882	2,843	2,400	2,784
<b>Total, 1st 60 institutions .....</b>	<b>3,411,046</b>	<b>199,329</b>	<b>110,656</b>	<b>256,414</b>	<b>431,079</b>	<b>865,705</b>	<b>466,398</b>	<b>308,122</b>	<b>773,343</b>
61 U of IL Chicago .....	19,007	0	2,219	1,099	2,728	8,297	4,089	0	575
62 Michigan Tech University .....	18,387	0	483	2,561	5,440	1,297	4,874	2,439	1,293
63 Michigan State University .....	18,348	0	0	4,742	2,627	3,015	3,457	1,556	2,951
64 NJ Inst of Technology .....	18,274	0	0	1,508	1,334	4,043	975	0	10,414
65 University of Houston .....	18,081	2,681	0	2,086	1,718	2,192	2,768	6,467	169
66 U MA Amherst .....	17,476	0	0	3,751	3,419	5,655	4,143	0	508
67 Boston University .....	17,455	737	8,599	0	0	4,944	737	2,326	112
68 Texas Tech University .....	17,363	0	0	1,528	5,877	5,664	455	2,727	1,112
69 U of Alabama Huntsville .....	17,154	0	0	1,855	723	5,213	5,408	592	3,363
70 University of Alabama, The .....	17,058	3,715	0	2,211	2,957	608	1,867	3,354	2,346
<b>Total, 1st 70 institutions .....</b>	<b>3,589,649</b>	<b>206,462</b>	<b>121,957</b>	<b>277,755</b>	<b>457,902</b>	<b>906,633</b>	<b>495,171</b>	<b>327,583</b>	<b>796,186</b>
71 Oklahoma State University .....	16,752	104	0	1,463	2,027	1,899	3,011	0	8,248
72 U of South Florida .....	16,698	0	0	329	11,658	2,669	801	694	547
73 Washington State U .....	16,660	0	2,890	1,055	2,357	4,268	2,006	3,218	866
74 Woods Hole Oceanogr Inst .....	16,637	1,180 i	0 i	1,218 i	1,292 i	4,097 i	3,622 i	0 i	5,228
75 Columbia U in City of NY .....	16,393	0	1,310	1,285	872	1,970	868	1,937	8,151
76 Kansas State University .....	15,935	0	0	2,217	2,605	763	2,098	0	8,252
77 Drexel University .....	15,828	0	1,459	1,321	3,010	3,646	958	1,902	3,532
78 SUNY at Stony Brook .....	15,574	0	594	0	0	4,130	4,141	5,866	843
79 U CA Irvine .....	15,518	0	604	2,407	4,071	3,445	4,488	0	503
80 Colorado State University .....	15,452	0	3,632	1,846	4,512	2,210	2,584	0	668
<b>Total, 1st 80 institutions .....</b>	<b>3,751,096</b>	<b>207,746</b>	<b>132,446</b>	<b>290,896</b>	<b>490,306</b>	<b>935,730</b>	<b>519,748</b>	<b>341,200</b>	<b>833,024</b>
81 Duke University .....	15,249	0	4,968	0	744	6,313	3,224	0	0
82 University of Oklahoma .....	15,163	0	0	6,240	3,212	2,549	1,715	0	1,447
83 Florida International U .....	14,641	0	439	0	732	1,025	586	0	11,859
84 NM Inst Mining & Tech .....	14,393	0	0	5,536	0	220	0	1,247	7,390
85 Oregon State University .....	13,903	0	1,064	196	3,710	2,038	1,589	1,624	3,682
86 Colorado School of Mines .....	13,878	0	0	3,445	0	0	0	8,272	2,161
87 Mercer University .....	13,639	475	0	39	0	280	1,661	11,001	183
88 U of Pennsylvania .....	13,315	0	2,242	1,777	529	617	1,372	3,852	2,926
89 Wichita State University .....	12,808	10,555	0	0	0	147	696	0	1,410
90 U of New Hampshire .....	12,462	0	0	767	4,652	5,166	1,187	0	690
<b>Total, 1st 90 institutions .....</b>	<b>3,890,547</b>	<b>218,776</b>	<b>141,159</b>	<b>308,896</b>	<b>503,885</b>	<b>954,085</b>	<b>531,778</b>	<b>367,196</b>	<b>864,772</b>

See explanatory information and SOURCE at end of table.

**Table B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 2000**

[Dollars in thousands]

Institution and ranking	Total	Aero/ astro- nautical	Bioengin- eering/ Biomed- ical	Chemical	Civil	Elec- trical	Mechan- ical	Metal- lurgical and materials	Other
91 U of Arkansas Main .....	12,460	0	0	739	2,490	3,930	1,411	0	3,890
92 University of Kansas .....	12,403	995	0	1,891	2,518	6,068	839	0	92
93 Vanderbilt University .....	12,223	0	1,744	699	1,078	6,574	1,798	330	0
94 Wayne State University .....	12,155	0	2,486	1,812	802	2,093	2,223	7	2,732
95 University of Pittsburgh .....	11,858	0	1,328	3,540	444	1,216	461	2,321	2,548
96 Old Dominion University .....	11,712	1,942	0	0	745	5,400	1,510	0	2,115
97 Northeastern University .....	11,680	0	0	2,667	771	6,251	966	0	1,025
98 Florida State University .....	11,673	0	0	187	1,267	561	9,575	52	31
99 Florida Atlantic U .....	11,325	0	0	0	0	1,727	382	0	9,216
100 Syracuse University .....	10,653	110	1,975	809	1,361	3,670	697	176	1,855
Total, 1st 100 institutions .....	4,008,689	221,823	148,692	321,240	515,361	991,575	551,640	370,082	888,276
Total, all other sampled institutions .....	541,626	30,453	23,331	53,070	80,608	121,224	80,270	28,913	123,757

<sup>1</sup> Johns Hopkins University includes Applied Physics Laboratory.

**KEY:** i = imputed

**NOTE:** Because of rounding, detail may not add to totals.

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2000