

TABLE 30. Federally financed higher education R&D expenditures in engineering, ranked by federal engineering R&D total, by subfield: FY 2011
(Dollars in thousands)

Rank	Institution	All engineering	Aeronautical/ astronautical engineering	Bioengineering/ biomedical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgical/ materials engineering	Engineering, nec
	All institutions	6,276,519	502,959	513,030	495,907	545,002	1,513,764	1,031,810	455,275	1,218,772
1	Johns Hopkins U. ^a	830,873	96,547 i	19,036 i	17,677 i	11,069 i	241,815 i	171,164 i	1,089 i	272,476 i
2	GA Institute of Technology	302,033	37,250	19,575	15,619	12,998	128,902	58,137	18,737	10,815
3	MA Institute of Technology	198,101	17,675	29,905	15,508	7,827	40,731	22,378	20,987	43,090
4	PA State U., University Park and Hershey Medical Ctr.	177,791	11,703	2,022	7,067	7,384	61,866	49,459	38,290	0
5	U. MI, Ann Arbor	135,430	8,171	10,269	7,043	9,957	32,950	22,692	7,230	37,118
6	U. TX, Austin	113,904	9,369	7,352	10,557	6,060	30,473	9,753	12,552	27,788
7	Purdue U., West Lafayette	110,547	8,227	3,345	8,571	24,341	26,536	18,334	3,602	17,591
8	Stanford U.	97,313	9,741	15,281	7,481	5,273	29,234	21,745	3,489	5,069
9	U. IL, Urbana-Champaign	96,520	6,873	2,714	5,854	11,932	28,069	19,494	13,213	8,371
10	VA Polytechnic Institute and State U.	88,672	5,111	3,424	2,562	22,586	17,866	21,540	7,591	7,992
11	TX A&M U., College Station	88,599	12,170	3,760	5,111	15,753	8,340	13,686	77	29,702
12	U. WA, Seattle	83,851	8,133	16,661	7,043	10,138	25,618	6,574	5,430	4,254
13	Carnegie Mellon U.	74,610	933	9,098	7,305	4,642	18,000	5,001	5,079	24,552
14	U. MD, College Park	74,266	13,221	2,095	1,646	4,985	16,241	14,944	8,386	12,748
15	U. Rochester	74,168	0	2,557	641	0	4,458	61,048	0	5,464
16	U. WI, Madison	72,393	0	3,833	8,632	8,248	8,234	3,392	4,663	35,391
17	UT State U.	72,005	59,119	437	0	4,877	4,143	2,764	0	665
18	Cornell U.	68,913	0	7,185	3,330	4,479	11,255	9,328	5,858	27,478
19	OH State U.	68,593	25	894	5,945	4,497	16,801	21,924	12,177	6,330
20	U. CO, Boulder	68,118	36,527	584	8,672	6,638	7,628	7,592	0	477
21	U. Dayton	67,566	5,204	322	7,282	933	7,994	4,882	37,157	3,792
22	U. CA, Berkeley	62,101	0	0	2,394	5,409	43,280	1	0	11,017
23	Northwestern U.	59,306	0	7,264	9,343	3,251	4,417	6,476	14,291	14,264
24	U. MN, Twin Cities	57,486	7,712	9,074	5,671	10,892	9,124	11,023	0	3,990
25	NM State U.	57,002	6,808	0	3,339	274	9,152	1,036	211	36,182
26	NC State U.	55,405	4,141	2,790	9,721	4,470	11,676	2,593	8,326	11,688
27	U.S. Air Force Academy	55,151	3,856	0	0	212	903	47,654	0	2,526
28	U. CA, Santa Barbara	54,834	0	13,924	4,382	1	18,067	5,393	13,067	0
29	AZ State U.	52,230	193	10,636	1,484	5,553	27,733	0	4,803	1,828
30	U. CA, San Diego	51,841	0	13,919	0	0	26,801	8,238	0	2,883
31	Princeton U.	50,471	7,870	0	6,902	6,290	6,316	0	23,092	1
32	U. CA, Santa Cruz	49,593	0	0	0	0	3,478	0	0	46,115
33	OK State U., Stillwater	47,375	0	0	28,876	2,309	896	1,790	0	13,504
34	Duke U.	44,849	0	13,266	0	2,129	18,093	4,240	1,184	5,937
35	U. FL	44,513	5,082	5,008	2,569	6,429	11,150	3,115	5,944	5,216
36	Columbia U. in the City of New York	43,654	2,779	11,223	5,270	2,300	14,807	4,135	43	3,097
37	U. DE	43,427	0	2,600	12,399	7,783	7,631	4,177	8,128	709
38	CA Institute of Technology	42,605	5,589	2,206	5,004	1,993	6,189	4,296	0	17,328

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39	U. CA, Los Angeles	41,015	0	2,666	4,504	1,720	12,989	10,643	3,647	4,846
40	Woods Hole Oceanographic Institution	40,390	0	0	0	0	0	0	0	40,390
41	U. Southern CA	40,003	1,415	11,945	2,711	1,793	14,472	2,064	1,391	4,212
42	Vanderbilt U.	39,458	0	4,658	3,839	8,038	19,207	3,691	0	25
43	U. TN, Knoxville	38,752	5,411	989	1,982	9,048	5,863	0	6,914	8,545
44	Rutgers, State U. NJ, New Brunswick	38,350	2,055	6,330	6,210	12,642	2,929	3,297	2,912	1,975
45	U. UT	38,193	0	7,274	8,327	7,489	8,708	1,634	4,454	307
46	MS State U.	37,680	1,804	239	3,948	3,302	15,979	8,228	222	3,958
47	U. VA, Charlottesville	35,917	0	6,419	2,147	1,137	5,181	9,799	7,854	3,380
48	U. CA, Davis	35,604	0	14,346	7,249	3,587	3,394	2,056	0	4,972
49	IA State U.	34,984	2,632	0	5,996	8,644	2,510	1,888	3,592	9,722
50	U. PA	34,888	0	9,185	3,143	0	10,106	5,188	6,283	983
51	SUNY, U. Buffalo	34,611	259	3,689	4,017	7,086	3,157	4,349	0	12,054
52	Boston U.	34,185	1,510	19,550	0	0	7,780	2,876	2,111	358
53	Rensselaer Polytechnic Institute	33,850	0	977	4,005	5,591	9,099	9,574	3,963	641
54	Harvard U.	33,824	0	3,337	2,060	1,454	4,394	3,745	3,740	15,094
55	Drexel U.	32,865	0	5,992	3,249	1,725	4,107	4,161	3,589	10,042
56	U. Notre Dame	32,630	6,176	0	4,737	3,127	15,723	0	2,867	0
57	FL State U.	31,315	0	231	152	344	12,839	14,999	2,634	116
58	U. AL, Huntsville	30,459	22,144	87	99	870	1,534	3,108	393	2,224
59	NJ Institute of Technology	29,988	0	2,335	4,567	1,333	1,380	308	0	20,065
60	Case Western Reserve U.	29,615	0	9,587	5,234	490	5,421	2,814	3,023	3,046
61	Auburn U., Auburn	29,416	1,496	0	7,597	2,189	5,074	2,552	365	10,143
62	Clemson U.	29,049	0	7,336	1,098	5,123	2,151	2,718	7,982	2,641
63	U. ND	28,971	0	0	1,372	688	552	826	0	25,533
64	U. AZ	28,534	1,367	2,347	1,328	1,684	10,920	7,265	1,593	2,030
65	Stevens Institute of Technology	28,334	0	581	1,327	1,369	1,006	2,040	1,245	20,766
66	Rice U.	27,208	0	10,675	1,455	2,907	8,615	3,556	0	0
67	U. MA, Amherst	26,346	0	0	9,763	3,029	9,664	3,890	0	0
68	SD School of Mines and Technology	26,148	0	0	1,358	570	290	1,190	5,070	17,670
69	U. NM	26,079	30	1,980	2,804	3,065	11,534	1,094	2,317	3,255
70	WV U.	25,971	0	0	3,213	3,113	6,183	9,495	223	3,744
71	U. KY	25,873	472	1,034	3,145	7,658	2,065	1,202	1,779	8,518
72	Northeastern U.	25,179	0	0	1,762	4,945	12,229	6,053	0	190
73	MI State U.	24,503	0	0	8,382	2,735	4,608	7,738	0	1,040
74	CO State U., Ft. Collins	23,830	0	0	1,968	6,506	11,746	2,935	0	675
75	U. Pittsburgh, Pittsburgh	23,820	0	7,661	5,379	2,397	1,757	4,103	0	2,523
76	U. SC, Columbia	23,448	0	0	5,319	1,482	5,664	10,454	0	529
77	U. NE, Lincoln	23,398	0	461	5,548	6,066	6,098	2,622	0	2,603

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78	MO U. of Science and Technology	22,670	0	0	0	670	4,277	1,578	5,285	10,860
79	U. ME	22,364	0	0	615	346	1,367	1,288	18,718	30
80	CO School of Mines	21,556	8	124	3,867	2,532	0	1,150	7,851	6,024
81	U. IA	21,147	0	287	939	9,382	2,238	1,356	0	6,945
82	Yale U.	20,566	0	2,537	3,007	0	5,081	3,681	0	6,260
83	WA State U.	20,498	0	115	2,558	2,974	3,579	1,890	1,880	7,502
84	MI Technological U.	20,270	0	1,041	677	2,789	5,895	8,490	1,282	96
85	U. Houston	19,852	265	1,593	4,041	1,862	4,807	2,627	1,940	2,717
86	U. CA, Irvine	19,763	0	4,563	1,643	3,329	4,530	5,698	0	0
87	OR State U.	19,575	0	3,246	1,506	3,696	2,807	2,504	773	5,043
88	U. CT	19,494	0	0	3,497	3,629	3,492	3,397	4,770	709
89	U. Central FL	19,456	631	8,948	0	1,054	5,414	1,826	1,565	18
90	U. MO, Columbia	17,635	0	284	225	3,048	7,710	2,238	0	4,130
91	CUNY, City C.	17,455	0	2,102	1,652	7,968	2,367	3,366	0	0
92	IL Institute of Technology	17,090	2,249	1,475	2,476	416	10,474	0	0	0
93	U. Cincinnati	16,828	1,836	2,105	3,156	554	3,653	2,311	0	3,213
94	Naval Postgraduate School	16,663	6,888	0	0	0	3,256	2,463	44	4,012
95	U. TX, Arlington	15,824	0	3,154	0	812	1,687	652	514	9,005
96	Mercer U.	15,402	5,083	0	0	0	233	7,552	2,514	20
97	Old Dominion U.	15,111	0	0	0	2,095	8,474	4,542	0	0
98	U. South FL, Tampa	14,866	0	0	864	7,685	1,937	3,837	0	543
99	U. Louisville	14,835	263	2,623	1,000	742	3,150	232	147	6,678
100	U. CA, Riverside	14,717	0	1,163	2,495	1,027	3,275	1,206	5,551	0
101	MT State U., Bozeman	14,696	0	2,723	755	7,055	1,429	583	0	2,151
102	U. AL, Tuscaloosa	14,511	691	0	5,769	1,660	1,789	3,002	1,600	0
103	Washington U., St. Louis	14,282	0	10,496	1,206	21	1,456	837	50	216
104	KS State U.	13,695	920	0	3,423	2,381	1,283	3,277	0	2,411
105	Tufts U.	13,449	0	6,936	1,421	2,312	1,405	1,375	0	0
106	FL International U.	13,418	0	157	0	1,140	2,031	1,461	0	8,629
107	NM Institute of Mining and Technology	13,217	0	0	4,405	170	332	415	430	7,465
108	U. AL, Birmingham	13,046	4,942	3,073	0	530	19	2,509	1,973	0
109	U. NH	12,811	0	0	321	4,373	5,796	1,894	343	84
110	U. NV, Reno	12,211	267	45	1,101	5,481	1,039	1,759	1,414	1,105
111	ND State U.	12,082	0	0	0	1,105	198	860	0	9,919
112	Dartmouth C.	11,990	0	4,493	660	260	3,929	2,648	0	0
113	TX Tech U.	11,954	0	0	2,125	354	6,609	1,226	0	1,640
114	U. IL, Chicago	11,762	0	3,635	547	1,526	3,297	2,757	0	0
115	U. AR, Fayetteville	11,515	0	525	558	1,467	5,783	841	0	2,341
116	U. ID	11,428	1,289	0	1,708	1,941	2,524	664	306	2,996

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117	Lehigh U.	11,407	0	75	1,888	2,474	2,539	2,118	2,129	184
118	SUNY, Stony Brook U.	10,610	0	4,805	0	0	3,125	395	2,088	197
119	Wayne State U.	10,407	0	2,261	817	1,188	2,606	3,254	0	281
120	LA State U., Baton Rouge	10,193	0	0	2,463	2,039	1,027	2,246	699	1,719
121	NC Agricultural and Technical State U.	9,887	0	54	146	831	925	5,965	0	1,966
122	Air Force Institute of Technology	9,748	1,225	0	0	0	7,556	0	351	616
123	Brown U.	9,425	0	1,827	428	0	1,924	1,375	1,949	1,922
124	Wichita State U.	9,405	8,426	0	0	0	136	82	0	761
125	Rochester Institute of Technology	8,974	0	0	466	61	2,174	1,051	0	5,222
126	U. TX, El Paso	8,943	0	0	0	1,289	3,270	2,514	625	1,245
127	U. OK	8,896	0	0	2,491	2,022	2,820	794	0	769
128	SD State U.	8,815	0	0	0	384	5,160	1,675	0	1,596
129	U. TX, Dallas	8,795	733 i	626 i	804 i	993 i	2,137 i	1,303 i	696 i	1,503 i
130	OH U.	8,775	4,340	0	2,182	1,578	393	19	192	71
131	George Mason U.	8,515	0	695	0	581	3,655	0	0	3,584
132	Embry-Riddle Aeronautical U.	8,381	8,228	0	16	0	0	0	0	137
133	Worcester Polytechnic Institute	8,175	0	1,574	2,337	130	1,436	2,020	0	678
134	Wright State U.	8,170	0	2,320	0	0	1,644	2,438	241	1,527
135	U. Toledo	8,113	0	409	1,027	1,644	537	4,496	0	0
136	U. PR, Mayaguez	7,997	0	0	1,884	1,377	1,808	621	1,420	887
137	SUNY, U. Albany, C. Nanoscale Science and Engineering	7,663	638 i	545 i	701 i	865 i	1,862 i	1,136 i	606 i	1,310 i
138	Brigham Young U., Provo	7,385	0	0	1,442	539	2,650	2,540	0	214
139	Boise State U.	7,216	67	15	127	143	3,273	258	1,972	1,361
140	George Washington U.	7,171	1,158	686	0	3,523	875	307	151	471
141	U. KS	7,095	312	1,494	1,349	1,427	2,383	115	15	0
142	U. AK, Fairbanks	6,989	108	0	1,018	358	4,710	434	361	0
143	U. MD, Baltimore County	6,914	0	0	1,375	33	4,572	934	0	0
144	U. VT	6,786	2,547	0	0	3,274	0	278	0	687
145	U. Akron	6,761	0	166	2,250	1,168	344	1,100	0	1,733
146	SUNY, U. Binghamton	6,613	0	294	0	0	2,928	3,218	0	173
147	Polytechnic Institute of NY U.	6,528	0	562	1,205	150	2,729	891	0	991
148	Syracuse U.	6,327	0	768	233	780	1,852	2,694	0	0
149	U. MA, Lowell	6,298	0	0	367	479	2,997	1,049	1,406	0
150	Clarkson U.	6,263	0	0	782	3,137	886	1,458	0	0
151	LA Tech U.	5,967	0	2,120	138	550	330	438	427	1,964
152	Cleveland State U.	5,908	0	3,798	577	687	311	535	0	0
153	Jackson State U.	5,866	0	0	0	566	3,460	0	0	1,840
154	U.S. Naval Academy	5,789	1,454	0	0	0	991	1,948	0	1,396
155	Morgan State U.	5,785	0	0	0	1,308	316	0	0	4,161

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156	Marshall U.	5,739	0	0	0	0	0	0	4,436	1,303
157	IN U.-Purdue U., Indianapolis	5,730	0	2,636	0	0	359	1,381	0	1,354
158	U. RI	5,604	22	0	1,486	207	1,302	1,868	54	665
159	U. NV, Las Vegas	5,202	0	0	0	704	1,341	3,080	0	77
160	Villanova U.	5,186 i	0 i	0 i	58 i	392 i	2,797 i	1,939 i	0 i	0 i
161	Portland State U.	5,164	0	0	0	2,704	1,157	745	491	67
162	U. TX, San Antonio	5,162	0	1,650	0	203	1,014	2,295	0	0
163	CA State U., Long Beach	5,109 i	0 i	0 i	0 i	689 i	31 i	294 i	0 i	4,095 i
164	U. WY	5,046	0	0	1,465	1,129	1,303	1,149	0	0
165	U. WI, Milwaukee	4,950	0	0	0	1,379	1,209	907	1,098	357
166	U. GA	4,543	0	685	0	0	0	0	0	3,858
167	Howard U.	4,307	0	0	0	1,240	1,612	162	0	1,293
168	U. WI, Superior	4,297 i	0 i	0 i	0 i	4,297 i	0 i	0 i	0 i	0 i
169	Emory U.	4,275	0	4,275	0	0	0	0	0	0
170	U. CA, Merced	4,193	0	556	0	2,392	635	299	311	0
171	Southern Methodist U.	4,149	0	0	0	66	3,150	308	0	625
172	U. MS and U. MS Medical Ctr.	4,030	0	0	269	1,198	507	305	0	1,751
173	U. TX, Medical Branch	4,015	0	4,015	0	0	0	0	0	0
174	TN Technological U.	3,946	0	0	423	486	608	1,770	0	659
175	U.S. Military Academy	3,937	0	0	0	552	1,565	552	0	1,268
176	U. HI, Manoa	3,932	0	0	0	473	735	1,500	0	1,224
177	U. MI, Dearborn	3,919	0	0	0	0	1,700	1,959	0	260
178	U. Miami	3,909	0	1,115	0	1,164	1,000	473	0	157
179	Northern IL U.	3,786	0	353	58	43	72	196	0	3,064
180	Tulane U.	3,649	0	698	2,941	10	0	0	0	0
181	Marquette U.	3,544	0	1,472	0	572	552	358	0	590
182	VA Commonwealth U.	3,493	0	492	550	0	999	1,146	0	306
183	Kettering U.	3,422	0	0	0	0	232	3,120	0	70
184	U. Memphis	3,408	0	388	0	1,517	1,446	57	0	0
185	CA Polytechnic State U., San Luis Obispo	3,348	1,404	0	0	251	29	489	94	1,081
186	U. North FL	3,311	0	0	0	6	61	3,244	0	0
187	FL Atlantic U.	3,282	0	0	0	33	73	232	0	2,944
188	Norfolk State U.	3,237	0	0	182	0	633	0	0	2,422
189	Lamar U.	3,157	0	0	2,395	756	6	0	0	0
190	Temple U.	3,148	0	0	0	1,299	402	1,447	0	0
191	Prairie View A&M U.	3,061	7	0	653	60	1,786	339	0	216
192	Oakland U.	3,024	0	0	0	0	359	2,534	0	131
193	CA State U., Los Angeles	3,012	1,268	0	0	1,185	559	0	0	0
194	MT Tech of U. MT	2,930	0	0	61	0	612	0	2,220	37

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195	U. NC, Charlotte	2,872	0	0	0	743	451	1,208	0	470
196	U. CO, Colorado Springs	2,818	2,365	0	0	10	57	28	0	358
197	U. North TX, Denton	2,687	0	0	0	0	120	12	2,209	346
198	CA State U., Sacramento	2,521	0	0	0	2,205	295	21	0	0
199	SC State U.	2,398 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	2,398 i
200	U. New Orleans	2,351	26	0	0	13	441	248	0	1,623
201	ID State U.	2,260	0	0	0	12	466	162	0	1,620
202	AL A&M U.	2,185 i	0 i	0 i	0 i	709 i	1,227 i	25 i	0 i	224 i
203	SUNY, C. of Environmental Science and Forestry	2,165 i	0 i	0 i	930 i	313 i	0 i	0 i	0 i	922 i
204	U. TN, Chattanooga	2,150	0	0	0	0	0	0	0	2,150
205	U. AR, Little Rock	2,134	1,584	7	0	0	40	20	284	199
206	Western MI U.	2,133	0	0	59	201	57	1,057	0	759
207	Loyola Marymount U.	2,028	0	0	0	5	0	2,023	0	0
208	Catholic U. America	1,965	0	570	0	307	389	699	0	0
209	U. LA, Lafayette	1,965	0	0	514	231	482	514	224	0
210	U. Tulsa	1,948	0	0	1,660	0	76	212	0	0
211	FL A&M U.	1,947	0	0	21	225	223	799	0	679
212	U. Denver	1,941	65	506	0	0	573	488	309	0
213	San Diego State U.	1,910	144	14	0	105	380	1,064	0	203
214	U. MA, Dartmouth	1,837	0	104	0	464	631	277	243	118
215	San Jose State U.	1,747	342	0	116	450	460	125	0	254
216	U. CO, Denver and Anschutz Medical Campus	1,741	0	37	68	1,330	35	217	54	0
217	U. MD, Baltimore	1,729	0	1,729	0	0	0	0	0	0
218	U. TX, Pan American	1,683	0	0	0	67	91	472	633	420
219	Southern IL U., Carbondale	1,641	0	0	0	289	336	45	970	1
220	Lawrence Technological U.	1,626	0	658	0	968	0	0	0	0
221	Bucknell U.	1,606	0	369	282	124	94	737	0	0
222	FL Institute of Technology	1,549	1	0	40	217	425	866	0	0
223	TX A&M U., Kingsville	1,472	0	0	0	1,022	107	73	0	270
224	Rowan U.	1,456	0	0	77	962	289	128	0	0
225	U. Hartford	1,456	0	0	0	0	24	1,432	0	0
226	Central State U.	1,443	0	0	0	577	0	0	164	702
227	TN State U.	1,389	0	0	0	413	697	164	0	115
228	Eastern MI U.	1,385	0	6	351	0	0	918	0	110
229	U. TN, Institute of Agriculture	1,376	0	0	104	0	0	0	0	1,272
230	Murray State U.	1,372	0	0	0	0	0	0	0	1,372
231	Miami U.	1,317	0	0	22	0	341	137	0	817
232	CA Maritime Academy	1,200	0	0	0	0	0	0	0	1,200
233	Tuskegee U.	1,189	391	0	133	0	640	25	0	0

TABLE 30. Federally financed higher education R&D expenditures in engineering, ranked by federal engineering R&D total, by subfield: FY 2011

(Dollars in thousands)

Rank	Institution	All engineering	Aeronautical/ astronautical engineering	Bioengineering/ biomedical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgical/ materials engineering	Engineering, nec
234	Alfred U.	1,157	0	0	0	0	0	0	1,157	0
235	Santa Clara U.	1,083	540	53	0	29	120	0	0	341
236	MO State U.	1,078	0	70	0	61	270	0	0	677
237	Pittsburg State U.	1,044	12	3	1,007	0	0	0	22	0
238	Purdue U., Calumet	1,026	0	0	0	0	141	0	0	885
239	VA State U.	1,013	206	219	0	0	0	0	0	588
240	St. Louis U.	1,000	566	391	0	8	35	0	0	0
241	U. South AL	972	0	0	70	110	0	261	0	531
242	Benedict C.	967	0	0	0	0	967	0	0	0
243	SUNY, C. of Agriculture and Technology, Cobleskill	909	0	0	0	0	0	0	0	909
244	U. MN, Duluth	871	0	0	0	551	57	263	0	0
245	Baylor U.	826	0	0	0	0	446	380	0	0
246	San Francisco State U.	826	0	0	0	283	430	113	0	0
247	Southern IL U., Edwardsville	823	0	0	0	161	88	208	0	366
248	U. NE, Omaha	819	819	0	0	0	0	0	0	0
249	James Madison U.	809	0	0	1	773	35	0	0	0
250	Western New England C.	804	0	29	0	0	0	775	0	0
251	Lafayette C.	757	0	0	371	155	42	189	0	0
252	Northern AZ U.	752	0	98	0	42	219	393	0	0
253	U. HI, West O'ahu	702 i	55 i	0 i	1 i	8 i	41 i	518 i	0 i	79 i
254	U. Central OK	678	0	650	0	0	0	0	0	28
255	Bowling Green State U.	671	0	0	0	0	671	0	0	0
256	West TX A&M U.	668	0	0	99	0	8	0	0	561
257	Dine C.	658 i	51 i	0 i	1 i	7 i	39 i	486 i	0 i	74 i
258	CA State U., Northridge	645	75	0	0	0	256	191	0	123
259	Gonzaga U.	643	0	0	0	0	633	0	0	10
260	U. AK, Anchorage	618	75	0	0	251	277	0	0	15
261	Southern U. and A&M C., Baton Rouge	607 i	0 i	0 i	0 i	0 i	232 i	357 i	18 i	0 i
262	TX State U., San Marcos	606	0	35	0	0	66	7	476	22
263	SUNY, Farmingdale State C.	584	0	0	50	0	100	58	0	376
264	MN State U., Mankato	540	0	0	0	0	0	34	0	506
265	CA State U., Chico	539	0	0	0	47	268	224	0	0
266	Hampton U.	534	9	0	384	0	127	0	0	14
267	U. TX, Tyler	532	10	0	0	98	424	0	0	0
268	Milwaukee School of Engineering	527	0	90	0	210	0	227	0	0
269	Franklin W. Olin C. of Engineering	518	0	22	0	0	112	218	0	166
270	U. of the Pacific	515	0	68	0	31	0	0	183	233
271	CA State U., Fullerton	495	298	0	0	61	136	0	0	0
272	MS Valley State U.	446	9	0	0	0	0	0	0	437

TABLE 30. Federally financed higher education R&D expenditures in engineering, ranked by federal engineering R&D total, by subfield: FY 2011

(Dollars in thousands)

Rank	Institution	All engineering	Aeronautical/ astronautical engineering	Bioengineering/ biomedical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgical/ materials engineering	Engineering, nec
273	Harvey Mudd C.	438	0 i	34 i	68 i	25 i	191 i	83 i	10 i	27 i
274	Kent State U.	433	75	0	0	0	75	0	126	157
275	U. Southern MS	424	0	0	0	424	0	0	0	0
276	Bradley U.	399	0	0	0	42	0	35	0	322
277	East TN State U.	389	0	0	0	0	0	0	0	389
278	Middle TN State U.	381	341	0	0	0	0	0	0	40
279	PA State U., Harrisburg	369	40	61	40	61	61	63	43	0
280	U. WA, Bothell	353	0	0	0	0	0	0	0	353
281	Humboldt State U.	348	0	0	0	182	166	0	0	0
282	GA Southern U.	343	0	0	0	13	0	330	0	0
283	U.S. Coast Guard Academy	343	0	0	0	0	249	94	0	0
284	Western WA U.	343	0	0	0	0	0	343	0	0
285	TX A&M International U.	334	2	0	0	0	209	123	0	0
286	Cooper Union for the Advancement of Science and Art	326	0	290	0	0	25	0	0	11
287	U. MO, Kansas City	290	0	0	0	290	0	0	0	0
288	U. SD	284	0	284	0	0	0	0	0	0
289	Valparaiso U.	276	0	0	0	219	0	57	0	0
290	Union C., Schenectady	271	0	0	0	0	213	58	0	0
291	U. WI, La Crosse	271 i	92 i	0 i	0 i	0 i	0 i	0 i	0 i	179 i
292	Allen U.	260 i	1 i	20 i	40 i	15 i	113 i	49 i	6 i	16 i
293	LeTourneau U.	260	0	158	0	0	41	0	61	0
294	PA State U., Erie	249	0	50	0	50	50	50	49	0
295	CA State U., Fresno	246	0	0	0	0	209	37	0	0
296	TX A&M Health Science Ctr.	237	0	229	0	0	0	0	0	8
297	U. OR	226	0	0	0	226	0	0	0	0
298	Smith C.	218	5	0	49	0	61	0	0	103
299	FL Gulf Coast U.	216	0	216	0	0	0	0	0	0
300	Norwich U.	208	168	0	0	40	0	0	0	0
301	East Carolina U.	202	0	54	66	82	0	0	0	0
302	Edison State C.	185 i	14 i	0 i	0 i	2 i	11 i	137 i	0 i	21 i
303	CA State U., San Bernardino	184	0	0	0	184	0	0	0	0
304	IN U.-Purdue U., Ft. Wayne	184	0	0	0	0	0	0	0	184
305	Saginaw Valley State U.	183	0	0	0	0	0	183	0	0
306	CA State Polytechnic U., Pomona	182	0	0	0	0	0	182	0	0
307	U. MA, Boston	181	0	0	0	0	181	0	0	0
308	TX Southern U.	175	0	0	0	0	0	0	0	175
309	Messiah C.	169	0	169	0	0	0	0	0	0
310	Weber State U.	166	128	0	0	0	30	8	0	0
311	OR Institute of Technology	163	0	0	0	0	117	46	0	0

TABLE 30. Federally financed higher education R&D expenditures in engineering, ranked by federal engineering R&D total, by subfield: FY 2011

(Dollars in thousands)

Rank	Institution	All engineering	Aeronautical/ astronautical engineering	Bioengineering/ biomedical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgical/ materials engineering	Engineering, nec
312	CA State U., Stanislaus	161 i	13 i	11 i	15 i	18 i	39 i	24 i	13 i	28 i
313	Lyon C.	161	0	107	54	0	0	0	0	0
314	U. Bridgeport	159	0	0	0	0	159	0	0	0
315	U. New Haven	154	0	0	0	0	0	154	0	0
316	IN State U.	152	0	0	0	0	138	14	0	0
317	WV State U.	150	0	150	0	0	0	0	0	0
318	CA State U., San Marcos	141 i	0 i	141 i	0 i	0 i	0 i	0 i	0 i	0 i
319	PA State U., Altoona	134	0	0	0	0	134	0	0	0
320	East Central U.	132 i	14 i	14 i	5 i	14 i	22 i	19 i	11 i	33 i
321	Southern Polytechnic State U.	128	0	0	0	48	0	0	0	80
322	Morehouse C.	119 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	119 i
323	Fayetteville State U.	114	0	0	0	0	114	0	0	0
324	PA State U., Great Valley School of Graduate Professional Studies	114	0	29	0	0	29	56	0	0
325	U. Detroit Mercy	112	0	0	0	50	62	0	0	0
326	U. del Turabo	108	0	0	0	0	0	0	0	108
327	Harding U.	107	94	0	0	0	13	0	0	0
328	Rose-Hulman Institute of Technology	106	0	12	0	0	94	0	0	0
329	Polytechnic U. PR	105	0	0	0	21	84	0	0	0
330	Barnes-Jewish C. Goldfarb School of Nursing	103 i	5 i	16 i	9 i	7 i	22 i	16 i	10 i	18 i
331	AR State U., Jonesboro	101	0	0	0	0	101	0	0	0
332	U. DC	100	0	0	0	21	61	12	0	6
333	Seattle U.	99	0	0	0	34	65	0	0	0
334	Hope C.	96	0	0	0	0	0	36	60	0
335	Southern UT U.	96	0	0	0	0	0	0	0	96
336	U. MI, Flint	88	0	0	0	0	0	0	0	88
337	U. TX, Brownsville	88	0	0	0	0	0	0	0	88
338	SUNY, Institute of Technology, Utica/Rome	84	0	0	0	0	0	84	0	0
339	Bates C.	83	0	83	0	0	0	0	0	0
340	MN State U., Moorhead	80 i	7 i	6 i	7 i	9 i	19 i	12 i	6 i	14 i
341	Rutgers, State U. NJ, Newark	79	0	38	0	0	0	0	0	41
342	Capitol C.	73 i	4 i	11 i	6 i	5 i	16 i	11 i	7 i	13 i
343	Swarthmore C.	72	0	0	0	0	33	39	0	0
344	McNeese State U.	68	0	0	0	0	0	68	0	0
345	CUNY, New York City C. of Technology	65	0	0	0	0	0	65	0	0
346	U. San Diego	64	0	0	0	0	0	0	0	64
347	Ashland U.	56 i	3 i	9 i	5 i	3 i	12 i	9 i	5 i	10 i
348	Hendrix C.	53	53	0	0	0	0	0	0	0
349	Youngstown State U.	53	0	0	0	27	0	26	0	0

TABLE 30. Federally financed higher education R&D expenditures in engineering, ranked by federal engineering R&D total, by subfield: FY 2011
(Dollars in thousands)

Rank	Institution	All engineering	Aeronautical/ astronautical engineering	Bioengineering/ biomedical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgical/ materials engineering	Engineering, nec
350	Grand Valley State U.	52 i	0 i	0 i	0 i	52 i	0 i	0 i	0 i	0 i
351	National Flight Test Institute	52	52	0	0	0	0	0	0	0
352	Clark Atlanta U.	49	0	0	0	0	0	0	0	49
353	Gallaudet U.	49	0	0	0	0	0	0	0	49
354	U. WI, Platteville	47 i	0 i	0 i	0 i	47 i	0 i	0 i	0 i	0 i
355	U. North AL	46 i	5 i	5 i	2 i	5 i	7 i	6 i	4 i	12 i
356	Western IL U.	46	0	0	0	0	0	0	46	0
357	Alcorn State U.	44	0	0	0	0	0	0	0	44
358	Wilkes U.	44	0	0	0	0	0	44	0	0
359	Salish Kootenai C.	43	0	0	0	0	43	0	0	0
360	U. Southern ME	43	8	29	0	0	6	0	0	0
361	CO State U., Pueblo	42	0	0	0	14	0	14	0	14
362	CA U. PA	41	0	0	0	0	41	0	0	0
363	Unity C.	40	0	0	0	0	0	40	0	0
364	U. Portland	40	0	0	0	32	0	8	0	0
365	U. WI, Stout	39 i	0 i	0 i	0 i	0 i	39 i	0 i	0 i	0 i
366	OH Northern U.	38	0	0	0	0	13	10	15	0
367	St. Mary's U., San Antonio	36	0	0	0	0	0	0	0	36
368	National U.	35 i	1 i	5 i	1 i	2 i	5 i	19 i	0 i	2 i
369	RI School of Design	31	31	0	0	0	0	0	0	0
370	Heidelberg U.	29 i	1 i	4 i	1 i	2 i	3 i	16 i	0 i	2 i
371	Philander Smith C.	28 i	0 i	2 i	4 i	2 i	12 i	5 i	1 i	2 i
372	C. of Menominee Nation	26 i	0 i	2 i	4 i	1 i	11 i	5 i	1 i	2 i
373	ME Maritime Academy	26 i	3 i	3 i	1 i	3 i	4 i	4 i	1 i	7 i
374	U. MD, Eastern Shore	26	0	0	0	0	0	0	0	26
375	CA State U., Monterey Bay	25	0	0	0	25	0	0	0	0
376	Fairfield U.	24	0	0	0	0	0	0	0	24
377	CUNY, C. Staten Island	23	23	0	0	0	0	0	0	0
378	Elizabethtown C.	22	0	0	0	0	22	0	0	0
379	Bryant U.	20	0	0	0	0	20	0	0	0
380	Oglala Lakota C.	20	0	0	0	0	0	0	0	20
381	Xavier U. LA	19	0	0	0	0	0	0	0	19
382	KY State U.	17	0	0	0	0	0	0	0	17
383	Taylor U.	17	17	0	0	0	0	0	0	0
384	U. AK, Southeast	16	0	0	0	16	0	0	0	0
385	Hofstra U.	14	0	0	0	0	0	0	0	14
386	New School	14	0	0	0	0	7	7	0	0
387	Christian Brothers U.	13 i	1 i	2 i	0 i	1 i	1 i	7 i	0 i	1 i
388	Dillard U.	13 i	13 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i

TABLE 30. Federally financed higher education R&D expenditures in engineering, ranked by federal engineering R&D total, by subfield: FY 2011
(Dollars in thousands)

Rank	Institution	All engineering	Aeronautical/ astronautical engineering	Bioengineering/ biomedical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgical/ materials engineering	Engineering, nec
389	St. Cloud State U.	13	0	0	0	0	13	0	0	0
390	Vassar C.	13	8	5	0	0	0	0	0	0
391	Widener U., Chester	12	0	0	0	0	0	0	12	0
392	Purdue U., North Central	11	0	0	0	0	0	0	0	11
393	SUNY, C. of Agriculture and Technology, Morrisville	11	11	0	0	0	0	0	0	0
394	Valley City State U.	11 i	1 i	1 i	0 i	1 i	2 i	2 i	1 i	3 i
395	Alderson-Broadbuss C.	10 i	0 i	1 i	1 i	1 i	1 i	5 i	0 i	1 i
396	Trinity C., Hartford	9	0	9	0	0	0	0	0	0
397	Citadel Military C. SC	8	0	0	0	7	1	0	0	0
398	Whitman C.	8	0	0	0	0	0	0	0	8
399	AR Tech U.	7 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i	7 i
400	Ball State U.	6	6	0	0	0	0	0	0	0
401	Armstrong Atlantic State U.	4 i	4 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
402	Bloomsburg U. PA	3	0	0	0	0	3	0	0	0
403	Loyola U., MD	3	0	0	0	0	0	0	0	3
404	MT State U., Havre	3	0	0	3	0	0	0	0	0
405	U. Houston, Downtown	3	0	0	0	0	0	3	0	0
406	Austin C.	2 i	1 i	0 i	0 i	0 i	0 i	1 i	0 i	0 i
407	Central CT State U.	2	2	0	0	0	0	0	0	0
408	Linfield C.	1 i	0 i	0 i	0 i	1 i	0 i	0 i	0 i	0 i
409	U. NC, Wilmington	1	0	0	0	1	0	0	0	0
410	VA Military Institute	1	0	0	0	0	0	1	0	0

i = imputed.

nec = not elsewhere classified.

^a Johns Hopkins University includes Applied Physics Laboratory, with \$779,364 thousand in federally financed R&D expenditures in engineering in FY 2011.

NOTES: Institutions reporting zero expenditures in ranked total for FY 2011 are not listed in this table. Tied institutions are ranked alphabetically. Institutions ranked are geographically separate campuses headed by a campus-level president or chancellor. Some campuses are part of large multi-campus universities; some are part of state university systems. For a complete listing of campuses that belong to a larger university or system and their aggregate R&D expenditures, see table A-3.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2011.