

TABLE 58

Foreign R&D employment and level of education of researchers, by occupation, industry, and company size: 2016

(Thousands)

Industry and company size	NAICS code	Total	Researchers ^a		R&D technicians and equivalent staff	Other R&D supporting staff
			Total	With PhD		
All industries	21-23, 31-33, 42-81	674	488	30	126	61
Manufacturing industries	31-33	406	310	21	58	38
Food	311	14	9	i *	3	2
Beverages and tobacco products	312	3	2	*	*	*
Textiles, apparel, and leather products	313-16	1	*	i *	*	i *
Wood products	321	*	*	*	*	*
Paper	322	2	2	*	*	*
Printing and related support activities	323	*	*	i 0	*	i *
Petroleum and coal products	324	*	*	*	*	*
Chemicals	325	63	38	8	11	14
Basic chemicals	3251	5	2	1	2	1
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	3	2	*	1	*
Pesticides, fertilizers, and other agricultural chemicals	3253	2	i 1	i *	1	i *
Pharmaceuticals and medicines	3254	39	22	6	5	12
Soaps, cleaning compounds, and toilet preparations	3256	7	6	1	1	1
Paints, coatings, adhesives, and other chemicals	3255, 3259	7	4	*	2	1
Plastics and rubber products	326	8	4	1	2	1
Nonmetallic mineral products	327	1	1	i *	1	*
Primary metals	331	1	*	*	*	*
Fabricated metal products	332	3	2	*	*	1
Machinery	333	35	28	1	5	2
Agricultural implements	33311	6	5	*	1	*
Semiconductor machinery	333242	5	4	*	*	*
Engines, turbines, and power transmission equipment	3336	4	4	*	*	*
Other machinery	other 333	20	15	i 1	3	i 1
Computer and electronic products	334	160	134	6	15	11
Communications equipment	3342	29	25	*	3	2
Semiconductors and other electronic components	3344	61	55	i 2	3	i 2
Navigational, measuring, electromedical, and control instruments	3345	30	24	2	4	3
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	7	4	i 1	2	i 1
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	4	3	*	*	*
Other measuring and controlling devices	other 3345	20	16	1	2	i 1
Other computer and electronic products	other 334	40	31	i 2	5	5
Electrical equipment, appliances, and components	335	23	21	i 1	2	*
Transportation equipment	336	68	54	2	12	2
Automobiles, bodies, trailers, and parts	3361-63	43	34	1	7	2
Aerospace products and parts	3364	24	18	1	5	*
Aircraft, aircraft engines, and aircraft parts	336411-13	24	18	1	5	*
Guided missiles, space vehicles, and related parts	336414-15, 336419	*	*	0	*	*
Military armored vehicles, tanks, and tank components	336992	0	0	0	0	0
Other transportation	other 336	2	1	i *	*	i *
Furniture and related products	337	*	*	*	*	*
Miscellaneous manufacturing	339	22	15	1	5	2
Medical equipment and supplies	3391	17	12	1	5	1
Other miscellaneous manufacturing	3399	5	i 3	i *	1	1
Nonmanufacturing industries	21-23, 42-81	268	177	8	67	23
Mining, extraction, and support activities	21	2	2	*	*	*

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			Total	With PhD		
Utilities	22	*	*	*	*	*
Wholesale trade	42	*	*	i	*	i
Electronic shopping and electronic auctions	454111-12	1	i	*	i	*
Transportation and warehousing	48-49	*	0	0	*	0
Information	51	137	104	4	21	12
Publishing	511	98	81	2	7	10
Newspaper, periodical, book, and directory publishers	5111	*	*	i	0	*
Software publishers	5112	98	81	2	7	10
Telecommunications	517	1	i	*	i	*
Data processing, hosting, and related services	518	25	13	1	11	1
Other information	other 51	13	9	2	3	*
Finance and insurance	52	10	7	*	3	*
Real estate and rental and leasing	53	*	*	*	*	0
Lessors of nonfinancial intangible assets (except copyrighted works)	533	*	*	*	0	0
Other real estate and rental and leasing	other 53	*	*	*	*	0
Professional, scientific, and technical services	54	114	64	4	42	9
Architectural, engineering, and related services	5413	6	6	1	*	*
Computer systems design and related services	5415	48	40	2	3	5
Scientific research and development services	5417	55	14	1	37	4
Biotechnology research and development	541711	14	8	1	5	*
Physical, engineering, and life sciences (except biotechnology) research and development	541712	40	5	i	1	i
Social sciences and humanities research and development	541720	*	*	i	0	*
Other professional, scientific, and technical services	other 54	6	4	i	*	i
Health care services	621-23	*	*	*	*	*
Other nonmanufacturing	23, 44-45 (excluding 454111-12), 55-56, 624, 71-72, 81	2	1	*	1	1
All companies (number of domestic employees)	-	674	488	30	126	61
Micro companies ^b						
5-9	-	2	1	i	*	*
Small companies						
10-19	-	3	2	i	*	*
20-49	-	7	5	1	1	*
Medium companies						
50-99	-	7	5	*	i	1
100-249	-	15	11	*	3	1
Large companies						
250-499	-	18	14	1	3	1
500-999	-	24	17	1	5	2
1,000-4,999	-	163	120	7	32	11
5,000-9,999	-	78	56	5	15	7
10,000-24,999	-	130	74	7	41	15
25,000 or more	-	226	182	8	23	22

* = amount < 500; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Researchers include R&D scientists and engineers and their managers.

^b Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

Note(s)

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2016.