

Table SLBR-27

## Employed scientists and engineers, by race or ethnicity and occupation: 2019

(Thousands and percent)

Occupation	Total	Asian		American Indian or Alaska Native		Black or African American		Hispanic or Latino		White		Native Hawaiian or Other Pacific Islander		More than one race	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All occupations	28,627	3,869	13.5	89	0.3	2,065	7.2	2,646	9.2	19,225	67.2	82	0.3	650	2.3
S&E occupations	7,466	1,543	20.7	s	s	379	5.1	564	7.6	4,784	64.1	17	0.2	158	2.1
Computer and mathematical scientists	3,774	955	25.3	s	s	214	5.7	238	6.3	2,259	59.9	6	0.2	88	2.3
Computer and information scientists	3,379	877	26.0	s	s	188	5.6	210	6.2	2,000	59.2	6	0.2	83	2.5
Computer and information scientists, research	90	27	30.7	s	s	3	3.4	6	6.7	52	57.9	s	s	s	s
Computer network architects	40	10	25.8	s	s	5	12.6	1	3.6	23	58.0	s	s	s	s
Computer support specialists	294	31	10.7	s	s	29	9.9	25	8.7	200	68.0	s	s	s	s
Computer system analysts	362	106	29.2	s	s	24	6.6	28	7.8	196	54.3	s	s	7	2.0
Database administrators	129	25	19.3	s	s	6	4.5	10	8.0	82	64.0	s	s	s	s
Information security analysts	113	12	10.4	s	s	19	16.8	12	10.7	57	50.3	s	s	13	11.7
Network and computer systems administrators	192	14	7.2	s	s	21	10.8	14	7.1	138	71.7	s	s	6	2.9
Software developers—applications and systems software	683	216	31.7	s	s	20	2.9	33	4.9	396	58.0	1	0.1	16	2.4
Web developers	147	25	17.1	s	s	5	3.2	13	8.9	101	68.3	s	s	4	2.5
Other computer information science occupations	432	64	14.8	s	s	24	5.7	22	5.1	297	68.7	s	s	13	3.1
Computer engineers—software	897	346	38.6	s	s	33	3.6	44	4.9	459	51.1	s	s	13	1.5
Mathematical scientists	284	55	19.4	s	s	s	s	20	7.2	183	64.3	s	s	3	0.9
Mathematicians	9	2	21.4	s	s	s	s	s	s	5	53.0	s	s	s	s
Operations research analysts, including modeling	182	31	17.1	s	s	s	s	14	7.9	117	64.4	s	s	2	1.2
Statisticians	67	18	26.3	s	s	s	s	5	7.6	40	60.5	s	s	s	s
Other mathematical scientists	26	4	s	s	s	1	s	s	s	20	77.8	s	s	s	s
Postsecondary teachers—computer and mathematical sciences	111	23	20.6	s	s	3	3.0	7	6.2	76	68.3	s	s	2	1.8
Computer sciences	30	8	27.5	s	s	1	3.4	4	12.2	17	55.1	s	s	1	1.8
Mathematics and statistics	81	15	18.0	s	s	2	2.8	3	4.0	59	73.3	s	s	1	1.8
Biological, agricultural, and environmental life scientists	698	157	22.5	1	0.1	23	3.3	64	9.1	439	62.9	s	s	14	1.9
Agricultural and food scientists	58	9	15.7	s	s	2	3.5	10	17.1	36	62.5	s	s	s	s
Biological and medical scientists	500	130	26.0	s	s	18	3.6	40	7.9	300	60.0	s	s	12	2.4
Biochemists and biophysicists	92	28	30.1	s	s	1	1.5	7	7.1	55	59.4	s	s	2	1.9
Biological scientists (e.g., botanists, ecologists, zoologists)	145	28	19.1	s	s	1	0.9	15	10.1	98	68.1	s	s	2	1.5
Medical scientists (excluding practitioners)	160	45	28.0	s	s	7	4.5	12	7.4	92	57.5	s	s	4	2.4
Other biological and life scientists	104	30	28.8	s	s	8	7.7	7	6.4	55	52.8	s	s	4	4.2
Forestry and conservation scientists	39	s	s	s	s	s	s	s	s	29	74.3	s	s	s	s
Postsecondary teachers—life and related sciences	101	18	17.4	s	s	2	2.4	7	6.6	74	73.1	s	s	s	s
Agriculture	9	s	s	s	s	s	s	s	s	6	66.8	s	s	s	s

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		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Biological sciences	85	15	18.0	s	s	2	2.3	5	6.0	62	73.5	s	s	s	s
Other natural sciences	7	s	s	s	s	s	s	s	s	6	75.9	s	s	s	s
Physical and related scientists	409	55	13.5	1	0.2	18	4.4	27	6.7	300	73.3	s	s	7	1.7
Chemists, except biochemists	132	19	14.4	s	s	7	4.9	9	6.9	95	71.8	s	s	s	s
Earth scientists, geologists, and oceanographers	85	5	6.2	s	s	s	s	3	3.8	74	87.7	s	s	1	1.5
Atmospheric and space scientists	21	3	12.6	s	s	s	s	1	2.4	17	80.8	s	s	s	s
Geologists, including earth scientists and oceanographers	63	3	4.0	s	s	s	s	3	4.3	57	90.1	s	s	1	1.1
Physicists and astronomers	45	11	23.4	s	s	s	s	2	4.5	29	65.1	s	s	s	s
Other physical and related scientists	67	5	6.8	s	s	6	9.6	7	10.7	47	70.1	s	s	s	s
Postsecondary teachers—physical and related sciences	80	16	19.7	s	s	3	3.6	6	7.4	54	67.8	s	s	s	s
Chemistry	25	8	33.7	s	s	1	4.0	2	9.1	12	50.2	s	s	s	s
Earth, environmental, and marine sciences	32	1	s	s	s	s	s	2	s	28	86.2	s	s	s	s
Physics	23	7	30.2	s	s	s	s	1	5.6	14	60.8	s	s	s	s
Social and related scientists	663	44	6.7	s	s	47	7.1	77	11.6	480	72.4	2	0.3	12	1.8
Economists	56	8	14.2	s	s	2	3.4	5	8.7	40	72.0	s	s	s	s
Political scientists	22	s	s	s	s	s	s	1	5.7	18	81.3	s	s	s	s
Psychologists, including clinical	228	7	3.2	s	s	13	5.5	21	9.2	183	80.3	s	s	3	1.4
Sociologists and anthropologists	16	s	s	s	s	s	s	1	7.4	12	79.3	s	s	s	s
Other social and related scientists	142	11	7.7	s	s	12	8.7	33	23.2	81	57.4	s	s	4	2.5
Postsecondary teachers—social and related sciences	200	17	8.4	s	s	17	8.7	15	7.7	145	72.7	s	s	4	2.2
Economics	21	3	13.8	s	s	s	s	1	4.9	16	74.0	s	s	s	s
Political science	22	1	6.6	s	s	3	12.1	1	4.8	16	73.1	s	s	s	s
Psychology	48	3	6.5	s	s	1	2.3	3	6.7	39	80.3	s	s	2	4.2
Sociology	18	2	12.0	s	s	2	10.1	1	s	13	70.2	s	s	s	s
Other social sciences	90	s	s	s	s	10	11.3	9	9.9	62	68.8	s	s	1	1.4
Engineers	1,921	331	17.2	5	0.2	77	4.0	159	8.3	1,305	67.9	s	s	37	1.9
Aerospace, aeronautical, or astronautical engineers	126	17	13.6	s	s	3	2.5	13	10.3	88	70.0	s	s	2	1.8
Chemical engineers	84	14	16.4	s	s	5	5.4	4	4.6	60	72.2	s	s	s	s
Civil, architectural, or sanitary engineers	294	40	13.6	s	s	12	4.1	30	10.2	208	70.8	s	s	3	1.1
Electrical or computer hardware engineers	412	110	26.8	s	s	22	5.4	30	7.3	237	57.5	s	s	7	1.6
Computer engineers—hardware	85	27	31.4	s	s	8	9.6	5	6.2	44	51.6	s	s	s	s
Electrical and electronics engineers	327	84	25.6	s	s	14	4.3	25	7.6	193	59.1	s	s	6	1.9
Industrial engineers	95	11	11.9	s	s	5	5.1	13	14.0	64	67.3	s	s	1	1.4

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Mechanical engineers	377	60	15.9	s	s	8	2.2	28	7.5	273	72.4	s	s	6	1.6
Other engineers	472	60	12.8	s	s	17	3.6	37	7.9	340	72.0	s	s	15	3.2
Bioengineers or biomedical engineers	39	8	20.1	s	s	2	4.8	2	5.8	27	67.5	s	s	1	1.6
Environmental engineers	58	6	9.6	s	s	1	1.7	3	5.1	47	81.3	s	s	s	s
Marine engineers and naval architects	9	s	s	s	s	s	s	s	s	8	85.5	s	s	s	s
Materials and metallurgical engineers	41	4	10.0	s	s	2	3.9	s	s	31	75.9	s	s	s	s
Nuclear engineers	12	1	4.9	s	s	s	s	s	s	8	65.9	s	s	s	s
Petroleum engineers	22	1	6.2	s	s	s	s	1	6.6	18	83.9	s	s	s	s
Sales engineers	114	9	8.2	s	s	5	4.0	10	9.1	83	73.0	s	s	5	4.5
Other engineers, including agricultural, mining, and geological	178	31	17.4	s	s	6	3.6	14	7.9	118	66.6	s	s	8	4.2
Postsecondary teachers—engineering	61	18	30.3	s	s	s	s	3	4.5	34	55.6	s	s	1	2.0
S&E-related occupations	8,893	1,151	12.9	29	0.3	613	6.9	821	9.2	6,053	68.1	30	0.3	198	2.2
Health-related occupations	5,728	754	13.2	23	0.4	399	7.0	491	8.6	3,895	68.0	25	0.4	139	2.4
Diagnosing or treating practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)	1,269	227	17.9	s	s	50	4.0	130	10.2	823	64.9	s	s	30	2.4
Registered nurses, pharmacists, dieticians, therapists, physician assistants, nurse practitioners	2,875	342	11.9	s	s	169	5.9	236	8.2	2,035	70.8	s	s	60	2.1
Health technologists and technicians (e.g., dental hygienists, health record technicians, licensed practical nurses, laboratory or radiology technicians)	574	69	12.0	s	s	63	10.9	31	5.4	388	67.7	s	s	22	3.8
Other health occupations	815	87	10.7	2	0.2	110	13.5	83	10.2	505	62.0	s	s	27	3.3
Postsecondary teachers—health and related sciences	196	28	14.2	s	s	8	3.9	13	6.5	144	73.5	s	s	s	s
S&E managers	999	135	13.5	s	s	70	7.0	99	9.9	679	68.0	s	s	14	1.4
Computer and information systems managers	237	62	26.3	s	s	12	4.9	21	8.9	139	58.7	s	s	3	1.1
Engineering managers	364	38	10.4	s	s	13	3.7	40	11.0	267	73.3	s	s	4	1.0
Medical and health services managers	324	28	8.7	s	s	43	13.2	33	10.0	215	66.3	s	s	5	1.7
Natural sciences managers	74	7	9.6	s	s	2	2.9	s	s	58	78.8	s	s	2	2.3
S&E precollege teachers	925	34	3.7	1	0.1	54	5.8	95	10.2	719	77.8	1	0.1	21	2.3
Secondary—computer, mathematics, or sciences	668	30	4.5	1	0.1	39	5.9	74	11.1	510	76.3	s	s	s	s
Secondary—social sciences	257	s	s	s	s	14	5.6	21	8.1	209	81.5	s	s	s	s
S&E technicians and technologists	973	189	19.4	3	0.3	84	8.6	115	11.8	560	57.6	s	s	20	2.0
Technologists and technicians in the biological and life sciences	125	30	23.7	s	s	7	5.9	25	19.7	62	49.3	s	s	2	1.3
Computer programmers (business, scientific, process control)	125	30	24.4	s	s	8	6.5	s	s	80	64.3	s	s	s	s
Electrical, electronic, industrial, and mechanical technicians	325	60	18.4	s	s	36	11.0	33	10.0	191	58.8	s	s	3	1.0



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		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Other postsecondary fields	60	s	s	s	s	4	6.3	4	6.3	47	78.1	s	s	1	1.5
Social services and related occupations	1,057	54	5.1	8	0.7	159	15.1	134	12.7	666	63.0	s	s	35	3.3
Clergy and other religious workers	142	13	8.9	s	s	5	3.6	12	8.4	111	78.2	s	s	s	s
Counselors (e.g., educational, vocational, mental health, substance abuse)	457	19	4.3	6	1.3	68	14.9	55	12.0	286	62.6	s	s	22	4.9
Social workers	458	22	4.8	s	s	86	18.8	67	14.6	269	58.8	s	s	13	2.8
Sales and marketing occupations	1,444	144	10.0	2	0.1	81	5.6	146	10.1	1,032	71.5	s	s	32	2.2
Insurance, securities, real estate, and business services	365	31	8.6	s	s	23	6.4	35	9.7	260	71.4	s	s	9	2.5
Sales—commodities except retail (e.g., industrial, medical, dental machinery, equipment, supplies)	235	10	4.4	s	s	3	1.2	16	6.7	197	84.0	s	s	s	s
Sales—retail (e.g., furnishings, clothing, motor vehicles, cosmetics)	328	34	10.3	s	s	25	7.6	41	12.6	221	67.3	s	s	7	2.1
Other marketing and sales occupations	517	68	13.2	s	s	30	5.8	54	10.4	354	68.4	s	s	10	2.0
Arts, humanities, and related occupations	305	24	7.9	s	s	11	3.5	21	7.0	236	77.5	s	s	11	3.8
Writers, editors, public relations specialists, artists, entertainers, broadcasters	302	24	7.9	s	s	11	3.6	21	7.1	234	77.4	s	s	11	3.8
Historians	3	s	s	s	s	s	s	s	s	s	s	s	s	s	s
Other non-S&E occupations	3,810	347	9.1	9	0.2	389	10.2	453	11.9	2,493	65.4	8	0.2	110	2.9
Accounting clerks and bookkeepers	214	28	13.2	s	s	8	3.8	24	11.4	152	70.7	s	s	1	0.6
Secretaries, receptionists, typists	223	22	9.7	s	s	25	11.0	26	11.5	146	65.4	s	s	5	2.2
Other administrative (e.g., record clerks, telephone operators)	633	70	11.1	s	s	96	15.2	107	16.9	322	50.8	s	s	32	5.1
Farmers, foresters, and fishermen	116	1	0.9	s	s	2	1.7	5	4.1	104	89.4	s	s	4	s
Lawyers, judges	614	38	6.2	s	s	38	6.2	50	8.2	471	76.8	s	s	14	2.3
Librarians, archivists, curators	85	10	11.7	s	s	7	7.7	4	5.2	59	69.4	s	s	s	s
Food preparation and service (e.g., cooks, waitresses, bartenders)	226	s	s	s	s	16	7.3	27	12.2	133	59.0	s	s	4	1.9
Protective services (e.g., firefighters, police, guards, wardens, park rangers)	185	13	6.9	s	s	24	13.1	21	11.6	121	65.1	s	s	5	2.9
Other service occupations, except health (e.g., probation officer, human services work)	477	33	7.0	s	s	65	13.6	70	14.6	299	62.6	s	s	8	1.6
Other teachers and instructors (e.g., private tutors, dance, flying, martial arts)	239	31	12.9	s	s	30	12.7	29	12.0	141	59.0	s	s	7	3.1
Construction and extraction occupations	58	s	s	s	s	6	11.1	9	16.0	37	63.5	s	s	1	s
Installation, maintenance, and repair occupations	113	6	5.7	s	s	8	6.8	21	18.5	77	68.3	s	s	s	s
Precision or production occupations (e.g., metal or wood workers, butchers, bakers, assemblers, tailors)	157	16	10.3	s	s	17	10.9	13	8.2	110	69.7	s	s	s	s
Transportation and material moving occupations	249	19	7.5	s	s	28	11.3	21	8.3	174	69.8	s	s	7	2.6
Other occupations	221	12	5.3	s	s	18	8.4	26	11.6	150	67.9	s	s	15	6.6

s = suppressed for reasons of confidentiality and/or reliability.

STEM = science, technology, engineering, and mathematics.

**Note(s):**

Scientists and engineers include those with one or more S&E or S&E-related degrees at the bachelor's level or higher or those who have only a non-S&E degree at the bachelor's level or higher and are employed in an S&E or S&E-related occupation. Hispanic or Latino may be any race; race categories exclude Hispanic or Latino origin. Detail may not add to total because of rounding. Non-S&E occupations include middle-skill and non-STEM occupations.

**Source(s):**

National Center for Science and Engineering Statistics, National Survey of College Graduates (NSCG), 2019.

*Science and Engineering Indicators*