

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All scientists and engineers												
All occupations	226,520	238,685	253,657	259,821	260,429	259,383	257,129	259,690	267,499	268,115	268,115	273,010
Scientists	137,760	144,674	154,415	159,126	160,600	160,871	159,701	160,695	166,640	167,016	167,016	169,279
Computer and mathematical scientists	47,349	50,540	54,911	57,701	59,289	59,899	59,954	61,973	64,272	65,229	65,229	68,644
Computer specialists	5,207	5,642	6,060	6,329	6,463	6,573	6,601	7,053	7,416	7,748	7,748	8,709
Cryptography analysts	11	11	10	10	12	15	13	12	13	13	13	14
Equipment specialists	990	1,087	1,167	1,176	1,245	1,268	1,288	1,331	1,391	1,445	1,445	1,538
Information technology management positions	32,569	34,647	37,840	40,150	41,645	42,154	42,146	43,462	45,059	45,688	45,688	47,799
Mathematical statisticians	1,295	1,367	1,440	1,448	1,428	1,426	1,401	1,417	1,456	1,436	1,436	1,438
Mathematicians	971	997	1,014	1,005	983	965	975	997	1,014	1,011	1,011	1,111
Operations research analysts	3,564	3,906	4,272	4,469	4,502	4,571	4,646	4,797	4,927	4,897	4,897	5,200
Statisticians	2,742	2,883	3,108	3,114	3,011	2,927	2,884	2,904	2,996	2,991	2,991	2,835
Life scientists	38,682	39,953	41,840	42,039	41,218	40,217	39,388	39,383	39,676	39,364	39,364	37,995
Agronomists	256	258	252	243	229	223	206	201	199	192	192	174
Animal scientists	83	86	98	91	93	90	89	86	90	88	88	81
Botanists	382	397	404	406	391	390	384	369	354	341	341	301
Ecologists	1,203	1,250	1,364	1,394	1,363	1,331	1,311	1,314	1,349	1,331	1,331	1,224
Entomologists	562	555	601	596	568	554	535	535	516	517	517	472
Environmental protection specialists	3,753	3,869	3,991	4,038	4,046	3,921	3,840	3,770	3,755	3,637	3,637	3,387
Fishery biologists	2,296	2,290	2,399	2,440	2,404	2,286	2,245	2,230	2,216	2,159	2,159	2,033
Geneticists	406	420	457	460	442	441	426	433	442	438	438	437
Horticulturalists	107	105	108	113	110	108	107	102	106	108	108	103
Microbiologists	2,291	2,447	2,545	2,543	2,515	2,435	2,378	2,322	2,312	2,266	2,266	2,157
Pharmacologists	527	566	603	609	603	605	637	675	713	740	740	755
Physiologists	395	406	407	406	411	388	362	349	338	320	320	305
Plant pathologists	298	299	312	311	299	286	270	261	251	244	244	226
Plant physiologists	187	185	189	187	173	162	156	155	144	132	132	113
Range conservationists	880	894	893	865	842	831	763	732	746	711	711	653
Soil conservationists	3,577	3,590	3,683	3,613	3,628	3,464	3,394	3,331	3,216	3,089	3,089	2,809
Soil scientists	1,136	1,097	1,094	1,055	960	897	847	832	813	759	759	666
Toxicologists	472	467	490	487	473	473	458	457	482	490	490	475
Wildlife biologists	2,183	2,180	2,289	2,282	2,233	2,166	2,141	2,136	2,130	2,127	2,127	2,018
Zoologists	88	80	91	95	89	83	79	69	63	56	56	48
Life scientists, general	17,600	18,512	19,570	19,805	19,346	19,083	18,760	19,024	19,441	19,619	19,619	19,558
Physical scientists	23,838	24,503	25,268	25,169	24,808	24,247	23,615	23,608	23,879	23,774	23,774	23,512
Astronomers and space scientists	411	422	453	459	458	451	448	431	426	446	446	455

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Chemists	5,403	5,513	5,680	5,635	5,533	5,468	5,413	5,486	5,564	5,545	5,545	5,495
Geodesists	59	66	66	62	60	54	50	56	59	60	60	64
Geologists	1,571	1,621	1,637	1,622	1,582	1,512	1,482	1,453	1,436	1,415	1,415	1,368
Geophysicists	422	433	436	434	426	422	412	412	431	408	408	418
Health physicists	691	732	767	783	794	787	778	785	789	776	776	755
Hydrologists	2,307	2,304	2,310	2,291	2,241	2,164	2,066	2,061	2,073	2,048	2,048	1,891
Meteorologists	2,725	2,761	2,811	2,838	2,791	2,724	2,671	2,627	2,597	2,600	2,600	2,582
Oceanographers	604	596	630	613	623	597	567	534	555	527	527	504
Physicists	2,340	2,388	2,512	2,427	2,409	2,363	2,350	2,374	2,398	2,417	2,417	2,426
Physical scientists, general	7,305	7,667	7,966	8,005	7,891	7,705	7,378	7,389	7,551	7,532	7,532	7,554
Social scientists	27,891	29,678	32,396	34,217	35,285	36,508	36,744	35,731	38,813	38,649	38,649	39,128
Agricultural market analysts	114	114	112	112	104	94	95	94	103	105	105	96
Agricultural market specialists	310	310	328	318	322	309	301	310	311	302	302	286
Anthropologists	93	104	126	120	132	135	130	133	135	136	136	139
Archaeologists	1,018	1,052	1,134	1,145	1,162	1,140	1,150	1,129	1,161	1,149	1,149	1,202
Civil rights analysts	38	37	56	52	51	49	50	50	46	51	51	58
Economists	3,984	4,123	4,301	4,236	4,235	4,143	4,142	4,201	4,357	4,213	4,213	3,981
Education research analysts	64	91	105	113	101	97	100	112	109	93	93	94
Foreign affairs analysts	2,029	2,132	2,363	2,614	2,752	2,778	2,733	660	2,883	2,647	2,647	2,602
Foreign agricultural affairs analysts	129	134	167	161	159	158	150	147	151	151	151	153
Geographers	658	707	791	799	796	777	764	763	818	859	859	897
Intelligence specialists	5,645	5,965	6,576	7,500	7,946	8,336	8,386	8,745	9,020	9,080	9,080	9,200
International cooperation specialists	2	1	13	15	19	24	28	37	36	34	34	34
International relations specialists	210	221	255	271	312	312	305	287	282	271	271	266
Psychologists	5,381	6,047	6,775	7,232	7,621	8,215	8,435	8,950	9,135	9,274	9,274	9,808
Sociologists	34	38	40	43	38	35	35	26	28	27	27	21
Trade specialists	626	660	708	699	655	615	589	599	637	622	622	576
Transportation industry analysts	90	105	106	105	116	108	101	98	95	95	95	90
Unemployment insurance specialists	52	49	54	44	42	38	46	41	43	38	38	37
Workforce research analysts	59	54	70	54	59	54	50	52	63	65	65	61
Social scientists, general	7,355	7,734	8,316	8,584	8,663	9,091	9,154	9,297	9,400	9,437	9,437	9,527
Engineers	88,760	94,011	99,242	100,695	99,829	98,512	97,428	98,995	100,859	101,099	101,099	103,731
Aerospace engineers	8,831	9,040	9,277	9,281	9,159	9,079	9,048	9,229	9,336	9,388	9,388	9,463
Chemical engineers	1,112	1,151	1,168	1,146	1,121	1,079	1,112	1,148	1,135	1,149	1,149	1,119

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Civil engineers	9,923	11,030	11,728	11,928	11,576	11,117	10,603	10,440	10,519	10,408	10,408	10,711
Electrical, electronics, and computer engineers	26,783	27,618	28,787	28,808	28,605	28,145	27,799	28,155	28,470	28,458	28,458	28,322
Computer engineers	4,123	4,252	4,438	4,463	4,481	4,485	4,435	4,549	4,651	4,740	4,740	4,843
Electrical engineers	3,796	4,125	4,526	4,665	4,638	4,576	4,617	4,724	4,938	5,108	5,108	5,508
Electronics engineers	18,864	19,241	19,823	19,680	19,486	19,084	18,747	18,882	18,881	18,610	18,610	17,971
Industrial engineers	1,598	1,732	1,961	1,978	1,925	1,913	1,880	1,905	1,914	1,835	1,835	1,764
Fire prevention engineers	170	190	218	231	234	231	223	211	232	233	233	238
Industrial engineers	972	1,065	1,221	1,228	1,218	1,193	1,186	1,207	1,195	1,134	1,134	1,085
Safety engineers	456	477	522	519	473	489	471	487	487	468	468	441
Mechanical engineers	10,032	10,957	11,742	11,807	11,748	11,570	11,506	12,033	12,572	12,841	12,841	13,864
Other engineers	30,481	32,483	34,579	35,747	35,695	35,609	35,480	36,085	36,913	37,020	37,020	38,488
Agricultural engineers	346	339	367	349	347	330	306	302	304	283	283	240
Biomedical engineers and bioengineers	459	509	577	623	667	709	757	821	838	863	863	876
Ceramic engineers	37	9	0	0	0	0	0	0	0	0	0	0
Environmental engineers	4,216	4,270	4,334	4,361	4,229	4,049	3,829	3,815	3,829	3,747	3,747	3,572
Materials engineers	1,135	1,192	1,244	1,279	1,272	1,258	1,279	1,319	1,323	1,349	1,349	1,436
Metallurgists	56	57	56	52	51	49	41	38	35	30	30	26
Mining engineers	175	173	175	156	146	140	123	120	131	132	132	103
Naval architects	734	778	831	841	865	862	861	880	932	934	934	921
Nuclear engineers	2,411	2,542	2,659	2,765	2,813	2,772	2,801	2,994	3,042	3,079	3,079	3,096
Petroleum engineers	278	286	290	297	297	312	326	325	361	360	360	339
Welding engineers	49	38	0	0	0	0	0	0	0	0	0	0
Engineers, general	20,585	22,290	24,046	25,024	25,008	25,128	25,157	25,471	26,118	26,243	26,243	27,879
Female												
All occupations	60,806	65,019	70,097	72,660	73,474	74,018	74,017	74,884	78,061	78,624	79,294	80,921
Scientists	47,987	51,112	55,028	57,032	57,746	58,298	58,273	58,704	61,340	61,680	61,899	62,865
Computer and mathematical scientists	15,593	16,393	17,434	18,088	18,321	18,360	18,288	18,638	19,147	19,198	19,400	19,716
Computer specialists	1,435	1,515	1,608	1,625	1,649	1,657	1,644	1,708	1,779	1,822	1,889	1,944
Cryptography analysts	5	5	5	4	6	8	6	6	7	7	7	8
Equipment specialists	84	103	111	108	110	112	115	121	124	117	115	142

Table 9-38

## Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Information technology management positions	10,911	11,354	12,020	12,560	12,804	12,805	12,741	12,920	13,217	13,233	13,284	13,447
Mathematical statisticians	514	561	592	597	593	607	602	611	648	642	638	652
Mathematicians	353	366	374	387	373	373	373	381	390	394	429	451
Operations research analysts	1,018	1,137	1,255	1,332	1,341	1,376	1,396	1,452	1,492	1,513	1,594	1,671
Statisticians	1,273	1,352	1,469	1,475	1,445	1,422	1,411	1,439	1,490	1,470	1,444	1,401
Life scientists	13,792	14,639	15,671	15,971	15,824	15,571	15,420	15,635	16,024	16,113	15,855	15,896
Agronomists	29	26	35	35	37	40	38	41	43	41	38	38
Animal scientists	17	21	27	30	39	37	36	33	35	35	29	32
Botanists	189	197	206	212	206	204	202	200	193	188	179	168
Ecologists	440	460	526	548	541	523	528	536	564	568	530	525
Entomologists	113	112	128	129	137	129	129	131	138	146	144	142
Environmental protection specialists	1,755	1,846	1,910	1,957	1,956	1,908	1,865	1,830	1,829	1,768	1,666	1,634
Fishery biologists	596	619	674	686	680	643	630	636	644	647	636	629
Geneticists	112	128	145	145	146	146	150	147	149	153	152	147
Horticulturalists	37	37	40	47	47	47	47	46	47	50	45	44
Microbiologists	1,033	1,157	1,231	1,247	1,240	1,199	1,186	1,163	1,166	1,161	1,156	1,136
Pharmacologists	202	228	251	247	253	248	280	303	326	342	368	378
Physiologists	95	101	108	107	110	114	113	107	112	108	107	108
Plant pathologists	82	82	90	95	92	85	78	75	69	67	67	67
Plant physiologists	45	43	47	45	40	40	38	36	39	37	37	34
Range conservationists	235	245	248	254	241	243	228	222	230	217	207	212
Soil conservationists	921	955	1,016	1,036	1,066	1,036	1,035	1,044	1,030	1,024	987	946
Soil scientists	206	208	218	221	206	184	174	180	193	177	172	174
Toxicologists	179	174	184	194	189	182	180	194	215	220	225	217
Wildlife biologists	701	712	751	750	744	728	717	726	736	736	719	701
Zoologists	14	13	21	24	25	24	23	19	19	17	15	15
Life scientists, general	6,791	7,275	7,815	7,962	7,829	7,811	7,743	7,966	8,247	8,411	8,376	8,549
Physical scientists	6,072	6,469	6,847	6,886	6,870	6,772	6,678	6,826	7,040	7,156	7,219	7,333
Astronomers and space scientists	62	72	85	94	100	103	109	107	107	121	129	131
Chemists	1,808	1,894	1,982	1,969	1,965	1,979	2,018	2,088	2,139	2,184	2,198	2,202
Geodesists	10	11	12	11	10	8	9	13	13	13	14	14
Geologists	391	418	431	443	441	437	445	449	443	444	451	451
Geophysicists	82	90	98	101	95	102	91	102	115	116	118	121
Health physicists	151	177	182	188	193	190	180	193	201	199	199	201

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Hydrologists	563	569	584	587	584	566	537	540	554	568	553	550
Meteorologists	306	326	345	356	362	356	353	360	364	377	390	408
Oceanographers	158	158	180	185	185	179	175	167	178	174	168	169
Physicists	241	262	294	290	287	287	285	296	310	311	325	336
Physical scientists, general	2,300	2,492	2,654	2,662	2,648	2,565	2,476	2,511	2,616	2,649	2,674	2,750
Social scientists	12,530	13,611	15,076	16,087	16,731	17,595	17,887	17,605	19,129	19,213	19,425	19,920
Agricultural market analysts	29	31	35	35	34	33	32	29	37	40	36	36
Agricultural market specialists	115	122	139	134	130	124	123	118	119	120	116	124
Anthropologists	49	57	73	72	81	81	79	83	88	91	89	95
Archaeologists	419	444	500	498	509	493	508	509	528	530	549	571
Civil rights analysts	25	26	39	32	32	30	31	31	29	32	32	33
Economists	1,281	1,335	1,394	1,392	1,398	1,387	1,413	1,443	1,476	1,432	1,407	1,361
Education research analysts	37	59	74	80	72	69	71	80	77	64	62	65
Foreign affairs analysts	820	876	976	1,095	1,209	1,213	1,184	247	1,270	1,175	1,147	1,193
Foreign agricultural affairs analysts	38	40	51	48	48	51	51	54	61	63	64	64
Geographers	221	230	269	263	259	248	243	238	260	275	293	307
Intelligence specialists	2,020	2,154	2,352	2,680	2,814	2,972	2,965	3,013	3,079	3,062	3,076	3,098
International cooperation specialists	0	0	8	11	14	19	20	29	24	16	16	14
International relations specialists	89	100	114	120	140	138	135	128	133	127	128	127
Psychologists	2,859	3,325	3,853	4,249	4,493	4,954	5,140	5,570	5,774	5,936	6,140	6,430
Sociologists	16	19	19	24	24	20	19	15	17	15	16	13
Trade specialists	281	295	322	329	321	295	279	303	324	307	300	288
Transportation industry analysts	26	26	26	26	31	28	26	25	24	26	26	26
Unemployment insurance specialists	25	25	25	22	21	20	21	21	22	19	20	18
Workforce research analysts	37	33	46	37	40	37	38	34	40	41	40	39
Social scientists, general	4,143	4,414	4,761	4,940	5,061	5,383	5,509	5,635	5,747	5,842	5,868	6,018
Engineers	12,819	13,907	15,069	15,628	15,728	15,720	15,744	16,180	16,721	16,944	17,395	18,056
Aerospace engineers	1,404	1,427	1,466	1,457	1,451	1,448	1,459	1,482	1,520	1,553	1,591	1,592
Chemical engineers	318	342	352	344	351	340	361	365	361	373	362	358
Civil engineers	1,563	1,828	2,003	2,095	2,066	2,015	1,964	1,973	2,019	2,043	2,130	2,233

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Electrical, electronics, and computer engineers	3,171	3,313	3,509	3,589	3,595	3,569	3,560	3,601	3,638	3,634	3,668	3,721
Computer engineers	749	763	800	808	798	794	773	794	815	826	808	838
Electrical engineers	457	510	555	581	593	583	585	613	626	640	667	701
Electronics engineers	1,965	2,040	2,154	2,200	2,204	2,192	2,202	2,194	2,197	2,168	2,193	2,182
Industrial engineers	326	374	449	456	452	441	439	452	455	436	428	423
Fire prevention engineers	11	15	20	21	22	23	22	21	23	24	23	23
Industrial engineers	231	269	321	326	329	310	308	318	316	307	312	300
Safety engineers	84	90	108	109	101	108	109	113	116	105	93	100
Mechanical engineers	920	1,055	1,189	1,221	1,226	1,225	1,258	1,361	1,460	1,503	1,606	1,713
Other engineers	5,117	5,568	6,101	6,466	6,587	6,682	6,703	6,946	7,268	7,402	7,610	8,016
Agricultural engineers	69	73	71	70	73	71	67	70	70	62	56	57
Biomedical engineers and bioengineers	161	184	206	226	247	263	301	336	351	359	362	373
Ceramic engineers	8	1	0	0	0	0	0	0	0	0	0	0
Environmental engineers	1,212	1,241	1,277	1,325	1,310	1,266	1,208	1,222	1,258	1,259	1,250	1,248
Materials engineers	197	205	220	233	231	242	249	271	259	258	279	299
Metallurgists	3	4	3	3	3	3	3	3	3	3	3	3
Mining engineers	10	11	12	13	12	12	12	14	17	17	17	13
Naval architects	86	95	109	118	124	131	131	131	144	145	140	146
Nuclear engineers	262	281	316	348	356	355	365	406	441	443	471	477
Petroleum engineers	32	36	39	44	43	52	57	56	60	61	61	59
Welding engineers	4	3	0	0	0	0	0	0	0	0	0	0
Engineers, general	3,073	3,434	3,848	4,086	4,188	4,287	4,310	4,437	4,665	4,795	4,971	5,341
<b>Male</b>												
All occupations	165,713	173,666	183,560	187,161	186,955	185,365	183,112	184,806	189,427	189,475	189,992	192,078
Scientists	89,773	93,562	99,387	102,094	102,854	102,573	101,428	101,991	105,289	105,320	105,274	106,404
Computer and mathematical scientists	31,756	34,147	37,477	39,613	40,968	41,539	41,666	43,335	45,125	46,031	47,243	48,928
Computer specialists	3,772	4,127	4,452	4,704	4,814	4,916	4,957	5,345	5,637	5,926	6,388	6,765
Cryptography analysts	6	6	5	6	6	7	7	6	6	6	6	6
Equipment specialists	906	984	1,056	1,068	1,135	1,156	1,173	1,210	1,267	1,328	1,357	1,396

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Information technology management positions	21,658	23,293	25,820	27,590	28,841	29,349	29,405	30,542	31,842	32,455	33,134	34,352
Mathematical statisticians	781	806	848	851	835	819	799	806	808	794	798	786
Mathematicians	618	631	640	618	610	592	602	616	624	617	640	660
Operations research analysts	2,546	2,769	3,017	3,137	3,161	3,195	3,250	3,345	3,435	3,384	3,464	3,529
Statisticians	1,469	1,531	1,639	1,639	1,566	1,505	1,473	1,465	1,506	1,521	1,456	1,434
Life scientists	24,890	25,314	26,169	26,068	25,394	24,646	23,968	23,748	23,652	23,251	22,563	22,094
Agronomists	227	232	217	208	192	183	168	160	156	151	142	136
Animal scientists	66	65	71	61	54	53	53	53	55	53	49	49
Botanists	193	200	198	194	185	186	182	169	161	153	144	133
Ecologists	763	790	838	846	822	808	783	778	785	763	739	699
Entomologists	449	443	473	467	431	425	406	404	378	371	355	330
Environmental protection specialists	1,998	2,023	2,081	2,081	2,090	2,013	1,975	1,940	1,926	1,869	1,778	1,753
Fishery biologists	1,700	1,671	1,725	1,754	1,724	1,643	1,615	1,594	1,572	1,512	1,470	1,404
Geneticists	294	292	312	315	296	295	276	286	293	285	289	290
Horticulturalists	70	68	68	66	63	61	60	56	59	58	62	59
Microbiologists	1,258	1,290	1,314	1,296	1,275	1,236	1,192	1,159	1,146	1,105	1,070	1,021
Pharmacologists	325	338	352	362	350	357	357	372	387	398	383	376
Physiologists	300	305	299	299	301	274	249	242	226	212	202	197
Plant pathologists	216	217	222	216	207	201	192	186	182	177	169	159
Plant physiologists	142	142	142	142	133	122	118	119	105	95	84	79
Range conservationists	645	649	645	611	601	588	535	510	516	494	465	441
Soil conservationists	2,656	2,635	2,667	2,577	2,562	2,428	2,359	2,287	2,186	2,065	1,955	1,863
Soil scientists	930	889	876	834	754	713	673	652	620	582	528	492
Toxicologists	293	293	306	293	284	291	278	263	267	270	262	258
Wildlife biologists	1,482	1,468	1,538	1,532	1,489	1,438	1,424	1,410	1,394	1,391	1,347	1,317
Zoologists	74	67	70	71	64	59	56	50	44	39	32	33
Life scientists, general	10,809	11,237	11,755	11,843	11,517	11,272	11,017	11,058	11,194	11,208	11,038	11,005
Physical scientists	17,766	18,034	18,421	18,283	17,938	17,475	16,937	16,782	16,839	16,617	16,329	16,179
Astronomers and space scientists	349	350	368	365	358	348	339	324	319	325	321	324
Chemists	3,595	3,619	3,698	3,666	3,568	3,489	3,395	3,398	3,425	3,360	3,322	3,293
Geodesists	49	55	54	51	50	46	41	43	46	47	50	50
Geologists	1,180	1,203	1,206	1,179	1,141	1,075	1,037	1,004	993	971	932	917
Geophysicists	340	343	338	333	331	320	321	310	316	292	292	297
Health physicists	540	555	585	595	601	597	598	592	588	577	567	554

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Hydrologists	1,744	1,735	1,726	1,704	1,657	1,598	1,529	1,521	1,519	1,480	1,384	1,341
Meteorologists	2,419	2,435	2,466	2,482	2,429	2,368	2,318	2,267	2,233	2,223	2,207	2,174
Oceanographers	446	438	450	428	438	418	392	367	377	353	349	335
Physicists	2,099	2,126	2,218	2,137	2,122	2,076	2,065	2,078	2,088	2,106	2,090	2,090
Physical scientists, general	5,005	5,175	5,312	5,343	5,243	5,140	4,902	4,878	4,935	4,883	4,815	4,804
Social scientists	15,361	16,067	17,320	18,130	18,554	18,913	18,857	18,126	19,673	19,421	19,139	19,203
Agricultural market analysts	85	83	77	77	70	61	63	65	66	65	60	60
Agricultural market specialists	195	188	189	184	192	185	178	192	192	182	168	162
Anthropologists	44	47	53	48	51	54	51	50	47	45	46	43
Archaeologists	599	608	634	647	653	647	642	620	633	619	618	631
Civil rights analysts	13	11	17	20	19	19	19	19	17	19	22	25
Economists	2,703	2,788	2,907	2,844	2,837	2,756	2,729	2,758	2,881	2,781	2,661	2,620
Education research analysts	27	32	31	33	29	28	29	32	32	29	29	29
Foreign affairs analysts	1,209	1,256	1,387	1,519	1,543	1,565	1,549	413	1,613	1,472	1,448	1,409
Foreign agricultural affairs analysts	91	94	116	113	111	107	99	93	90	88	90	89
Geographers	437	477	522	536	537	529	521	525	558	584	586	590
Intelligence specialists	3,625	3,811	4,224	4,820	5,132	5,364	5,421	5,732	5,941	6,018	6,029	6,102
International cooperation specialists	2	1	5	4	5	5	8	8	12	18	14	20
International relations specialists	121	121	141	151	172	174	170	159	149	144	141	139
Psychologists	2,522	2,722	2,922	2,983	3,128	3,261	3,295	3,380	3,351	3,328	3,321	3,375
Sociologists	18	19	21	19	14	15	16	11	11	12	10	8
Trade specialists	345	365	386	370	334	320	310	296	313	315	286	288
Transportation industry analysts	64	79	80	79	85	80	75	73	71	69	68	64
Unemployment insurance specialists	27	24	29	22	21	18	25	20	21	19	18	19
Workforce research analysts	22	21	24	17	19	17	12	18	23	24	22	22
Social scientists, general	3,212	3,320	3,555	3,644	3,602	3,708	3,645	3,662	3,652	3,590	3,502	3,508
Engineers	75,940	80,104	84,173	85,067	84,101	82,792	81,684	82,815	84,138	84,155	84,718	85,674
Aerospace engineers	7,426	7,613	7,811	7,824	7,708	7,631	7,589	7,747	7,816	7,835	7,955	7,871
Chemical engineers	794	809	816	802	770	739	751	783	774	776	771	761
Civil engineers	8,360	9,202	9,725	9,833	9,510	9,102	8,639	8,467	8,500	8,365	8,330	8,478

**Table 9-38****Occupations of scientists and engineers with at least a bachelor's degree employed by the federal government, by sex: 2008–19**

(Number)

Occupation and sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Electrical, electronics, and computer engineers	23,612	24,305	25,278	25,219	25,010	24,576	24,239	24,554	24,832	24,824	24,710	24,601
Computer engineers	3,374	3,489	3,638	3,655	3,683	3,691	3,662	3,755	3,836	3,914	3,908	4,005
Electrical engineers	3,339	3,615	3,971	4,084	4,045	3,993	4,032	4,111	4,312	4,468	4,724	4,807
Electronics engineers	16,899	17,201	17,669	17,480	17,282	16,892	16,545	16,688	16,684	16,442	16,078	15,789
Industrial engineers	1,272	1,358	1,512	1,522	1,473	1,472	1,441	1,453	1,459	1,399	1,373	1,341
Fire prevention engineers	159	175	198	210	212	208	201	190	209	209	202	215
Industrial engineers	741	796	900	902	889	883	878	889	879	827	818	785
Safety engineers	372	387	414	410	372	381	362	374	371	363	353	341
Mechanical engineers	9,112	9,902	10,553	10,586	10,522	10,345	10,248	10,672	11,112	11,338	11,794	12,151
Other engineers	25,364	26,915	28,478	29,281	29,108	28,927	28,777	29,139	29,645	29,618	29,785	30,471
Agricultural engineers	277	266	296	279	274	259	239	232	234	221	200	183
Biomedical engineers and bioengineers	298	325	371	397	420	446	456	485	487	504	503	503
Ceramic engineers	29	8	0	0	0	0	0	0	0	0	0	0
Environmental engineers	3,004	3,029	3,057	3,036	2,919	2,783	2,621	2,593	2,571	2,488	2,409	2,324
Materials engineers	938	987	1,024	1,046	1,041	1,016	1,030	1,048	1,064	1,091	1,106	1,137
Metallurgists	53	53	53	49	48	46	38	35	32	27	25	23
Mining engineers	165	162	163	143	134	128	111	106	114	115	106	90
Naval architects	648	683	722	723	741	731	730	749	788	789	779	775
Nuclear engineers	2,149	2,261	2,343	2,417	2,457	2,417	2,436	2,588	2,601	2,636	2,662	2,619
Petroleum engineers	246	250	251	253	254	260	269	269	301	299	288	280
Welding engineers	45	35	0	0	0	0	0	0	0	0	0	0
Engineers, general	17,512	18,856	20,198	20,938	20,820	20,841	20,847	21,034	21,453	21,448	21,707	22,537

**Note(s):**

Total may include employees who did not report sex; as a result, detail may not sum to total. National Center for Science and Engineering Statistics tabulations from data provided by the Office of Personnel Management. Data do not include the State Department Foreign Service. Data are as of September of each year.

**Source(s):**

National Center for Science and Engineering Statistics, special tabulations (2020) of Office of Personnel Management data.