

TABLE SA3-5

Skilled technical workforce occupations and employment in the American Community Survey: 2017

(Number)

Occupation	Employment
All occupations	17,002,829
Architecture and engineering occupations	820,722
Aerospace engineers	14,817
Architects, except naval	16,343
Biomedical engineers	2,251
Chemical engineers	4,590
Civil engineers	40,535
Computer hardware engineers	10,147
Drafters	111,986
Electrical and electronics engineers	44,860
Engineering technicians, except drafters	282,729
Engineers, all other	98,116
Environmental engineers	3,179
Industrial engineers, including health and safety	58,093
Marine engineers and naval architects	3,385
Materials engineers	9,022
Mechanical engineers	57,159
Petroleum engineers	6,223
Surveying and mapping technicians	50,951
Surveyors, cartographers, and photogrammetrists	6,336
Arts, design, entertainment, sports, and media occupations	172,073
Broadcast and sound engineering technicians and radio operators	60,549
Photographers	75,542
Technical writers	14,358
Television, video, and motion picture camera operators and editors	21,624
Business and financial operations occupations	251,418
Appraisers and assessors of real estate	35,683
Logisticians	75,039
Tax examiners and collectors, and revenue agents	25,111
Wholesale and retail buyers, except farm products	115,585
Computer and mathematical occupations	1,322,376
Actuaries	292
Computer and information research scientists	614
Computer network architects	44,698
Computer occupations, all other	292,350
Computer programmers	99,088
Computer support specialists	322,811
Computer systems analysts	131,080
Database administrators	30,626
Information security analysts	29,472
Miscellaneous mathematical science occupations	4,939
Network and computer systems administrators	85,465
Operations research analysts	35,719
Software developers, applications and systems software	190,212
Web developers	55,010
Construction and extraction occupations	3,552,569
Boilermakers	13,629
Brickmasons, blockmasons, and stonemasons	133,466
Carpenters	1,073,301
Construction and building inspectors	64,108

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Derrick, rotary drill, and service unit operators, oil, gas, and mining	23,853
Drywall installers, ceiling tile installers, and tapers	128,315
Earth drillers, except oil and gas	20,783
Electricians	704,915
Elevator installers and repairers	20,282
First-line supervisors of construction trades and extraction workers	729,497
Glaziers	39,124
Mining machine operators	47,317
Pipelayers, plumbers, pipefitters, and steamfitters	503,334
Structural iron and steel workers	50,645
Food preparation and serving related occupations	347,626
Chefs and head cooks	347,626
Healthcare practitioners and technical occupations	3,482,364
Audiologists	927
Chiropractors	2,165
Clinical laboratory technologists and technicians	152,214
Dental hygienists	115,444
Diagnostic related technologists and technicians	245,205
Dietitians and nutritionists	25,531
Emergency medical technicians and paramedics	139,476
Health diagnosing and treating practitioners, all other	5,554
Health practitioner support technologists and technicians	418,491
Licensed practical and licensed vocational nurses	749,084
Medical records and health information technicians	144,144
Miscellaneous health technologists and technicians	91,556
Nurse anesthetists	2,142
Nurse practitioners	4,617
Occupational therapists	6,870
Opticians, dispensing	46,859
Other healthcare practitioners and technical occupations	45,169
Pharmacists	6,560
Physical therapists	11,157
Physician assistants	5,891
Physicians and surgeons	5,601
Radiation therapists	9,173
Recreational therapists	2,203
Registered nurses	1,143,855
Respiratory therapists	71,674
Speech-language pathologists	2,631
Therapists, all other	28,171
Installation, maintenance, and repair occupations	3,342,386
Aircraft mechanics and service technicians	145,131
Automotive service technicians and mechanics	719,165
Bus and truck mechanics and diesel engine specialists	254,358
Computer, automated teller, and office machine repairers	115,042
Electric motor, power tool, and related repairers	19,380
Electrical and electronics repairers, industrial and utility	11,456
Electronic equipment installers and repairers, motor vehicles	5,992
Electronic home entertainment equipment installers and repairers	31,129
First-line supervisors of mechanics, installers, and repairers	222,437

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Heating, air conditioning, and refrigeration mechanics and installers	352,308
Heavy vehicle and mobile equipment service technicians and mechanics	178,049
Industrial and refractory machinery mechanics	330,052
Locksmiths and safe repairers	22,143
Maintenance and repair workers, general	450,626
Maintenance workers, machinery	20,987
Millwrights	34,573
Other installation, maintenance, and repair workers	222,753
Precision instrument and equipment repairers	47,805
Radio and telecommunications equipment installers and repairers	111,152
Riggers	11,626
Small engine mechanics	36,222
Life, physical, and social science occupations	176,698
Agricultural and food science technicians	22,472
Atmospheric and space scientists	1,511
Biological technicians	9,661
Chemical technicians	38,813
Chemists and materials scientists	5,580
Geological and petroleum technicians	12,971
Medical scientists	2,769
Miscellaneous life, physical, and social science technicians	75,021
Miscellaneous social scientists and related workers	5,622
Urban and regional planners	2,278
Management occupations	451,544
Architectural and engineering managers	26,560
Computer and information systems managers	159,209
Medical and health services managers	264,299
Natural sciences managers	1,476
Material moving occupations	71,244
Crane and tower operators	53,368
Pumping station operators	17,876
Office and administrative support occupations	78,599
Computer operators	53,197
Office machine operators, except computer	25,402
Personal care and service occupations	23,019
Morticians, undertakers, and funeral directors	23,019
Production occupations	2,637,706
Aircraft structure, surfaces, rigging, and systems assemblers	7,372
Bakers	166,992
Computer control programmers and operators	82,028
Engine and other machine assemblers	7,729
First-line supervisors of production and operating workers	735,137
Furnace, kiln, oven, drier, and kettle operators and tenders	8,640
Machinists	312,964
Miscellaneous plant and system operators	41,595
Prepress technicians and workers	21,074
Production workers, all other	1,042,583
Stationary engineers and boiler operators	66,260
Structural metal fabricators and fitters	23,203
Tool and die makers	48,861

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Water and wastewater treatment plant and system operators	73,268
Protective service occupations	208,453
Firefighters	208,453
Sales and related occupations	10,316
Sales engineers	10,316
Transportation occupations	53,716
Sailors and marine oilers	20,224
Transportation inspectors	33,492

Note(s)

The American Community Survey does not cover employment among self-employed workers and employment in private households. Employment estimates are of employed individuals aged 25 and older. Values do not include those employed in military occupations.

Source(s)

Census Bureau, American Community Survey (ACS), 2017, Public Use Microdata Sample (PUMS).

Science and Engineering Indicators