

Appendix table 3-1

**S&E occupations in the 1960 U.S. Census and 2011 American Community Survey**

Census, 1960	American Community Survey, 2011
Biological, agricultural, and environmental life scientists	Biological, agricultural, and environmental life scientists
Agricultural scientists	Agricultural and food scientists
Biological scientists	Biological scientists
Foresters and conservationists	Conservation scientists and foresters
	Medical scientists, and life scientists, all other
Mathematical scientists	Computer and mathematical scientists
Mathematicians	Computer and information research scientists
Statisticians and actuaries	Computer network architects
	Computer support specialists
	Computer systems analysts
	Database administrators
	Information security analysts
	Network and computer systems administrators
	Operations research analysts
	Software developers, applications and systems software
	Web developers
	Computer occupations, all other
	Miscellaneous mathematical science occupations, including mathematicians and statisticians
Physical scientists	Physical scientists
Chemists	Astronomers and physicists
Geologists and geophysicists	Atmospheric and space scientists
Physicists	Chemists and materials scientists
Miscellaneous natural scientists	Environmental scientists and geoscientists
	Physical scientists, all other
Social scientists	Social scientists
Economists	Economists
Psychologists	Psychologists
Miscellaneous social scientists	Urban and regional planners
	Miscellaneous social scientists, including survey researchers and sociologists
Engineers	Engineers
Aeronautical engineers	Aerospace engineers
Chemical engineers	Biomedical and agricultural engineers
Civil engineers	Chemical engineers
Electrical engineers	Civil engineers
Industrial engineers	Computer hardware engineers
Mechanical engineers	Electrical and electronics engineers
Metallurgical engineers and metallurgists	Environmental engineers
Mining engineers	Industrial engineers, including health and safety engineers
Sales engineers	Marine engineers and naval architects
Engineers nec	Materials engineers
	Mechanical engineers

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**S&E occupations in the 1960 U.S. Census and 2011 American Community Survey**

Census, 1960	American Community Survey, 2011
	Petroleum, mining, and geological engineers, including mining safety engineers
	Sales engineers
	Miscellaneous engineers, including nuclear engineers

nec = not elsewhere classified.

NOTES: The data reported in *Science and Engineering Indicators* on S&E employment level for 1960 are calculated using the Census Bureau's 1960 Decennial Census microdata, adjusted by the Integrated Public Use Microdata Series (IPUMS) from the University of Minnesota's Minnesota Population Center ([www.ipums.org](http://www.ipums.org)). The data on S&E employment level for 2011 are calculated using the 2011 American Community Survey (ACS) public use microdata sample files from the Census Bureau ([http://www.census.gov/acs/www/data\\_documentation/public\\_use\\_microdata\\_sample/](http://www.census.gov/acs/www/data_documentation/public_use_microdata_sample/)). Computer occupations were not present in the occupational classification system used in 1960. For more information on how occupational classification systems have changed over time, see Ian Wyatt's and Daniel Hecker's report, "Occupational Changes During the 20th Century" (*Monthly Labor Review*, March 2006). S&E employment levels for 1960 and 2011 do not include S&E postsecondary teachers. Although the 1960 Census data allow for separate identification of S&E postsecondary teachers, the 2011 ACS data aggregate postsecondary teachers of both S&E and non-S&E fields into one occupation code.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, based on 1960 Decennial Census and 2011 ACS, Census Bureau.

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