

**Science, Technology, Engineering and Mathematics Career Cluster Occupational Specialties and Related O*NET Occupations,
Sequenced by Career Pathway and Occupational Specialty Code**

Occupational Specialties		Related SOC/O*NET Occupation	
Code	Title	Code	Title
15.10000	Engineering and Technology Pathway		
15.10010	Safety Engineering	17-2111.00	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors
15.10010	Safety Engineering	17-2111.01	Industrial Safety and Health Engineers
15.10020	Fire Protection Engineering	17-2111.02	Fire-Prevention and Protection Engineers
15.10030	Electrical Safety	17-2111.01	Industrial Safety and Health Engineers
15.10040	Failure Analysis	17-2111.01	Industrial Safety and Health Engineers
15.10040	Failure Analysis	17-2111.03	Product Safety Engineers
15.10050	Hazardous Waste Engineering	17-2081.00	Environmental Engineers
15.10060	Industrial Engineering	17-2112.00	Industrial Engineers
15.10070	Quality Engineer	17-2112.00	Industrial Engineers
15.10080	Facilities Engineer	17-2141.00	Mechanical Engineers
15.10090	Cost Engineer	17-2112.00	Industrial Engineers
15.10100	Operations Research Engineer	17-2112.00	Industrial Engineers
15.10110	Manufacturing Engineer	17-2112.00	Industrial Engineers
15.10120	Manufacturing Processes Engineer	17-2112.00	Industrial Engineers
15.10130	Welding	17-2131.00	Materials Engineers
15.10140	Packaging Engineer	17-2112.00	Industrial Engineers
15.10150	Mechanical Engineering-HVAC	17-2141.00	Mechanical Engineers
15.10160	Propulsion	17-2141.00	Mechanical Engineers
15.10160	Propulsion	17-2011.00	Aerospace Engineers
15.10170	Mechanical Drafters	17-3013.00	Mechanical Drafters
15.10180	Electrical Engineering	17-2071.00	Electrical Engineers
15.10190	Energy Transmission Engineer	17-2071.00	Electrical Engineers
15.10200	Power Systems Engineer	17-2071.00	Electrical Engineers
15.10210	Acoustic Engineer	17-2199.00	Engineers, All Other
15.10220	EMC/EMI Engineer	17-2071.00	Electrical Engineers
15.10230	Sound Engineer	27-4014.00	Sound Engineering Technicians
15.10240	Radio/TV Broadcast Engineer	27-4012.00	Broadcast Technicians
15.10250	Communications Engineer	17-2072.00	Electronics Engineers, Except Computer
15.10260	Electrical Technician	17-3023.00	Electrical and Electronic Engineering Technicians
15.10270	Emerging Engineers	99-9999.00	No comparable O*NET Occupation
15.10280	Photonics	17-2199.00	Engineers, All Other

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15.10290	Nanotechnology	17-2199.00	Engineers, All Other
15.10300	Optical Engineering	17-2199.00	Engineers, All Other
15.10310	Materials Engineering	17-2131.00	Materials Engineers
15.10320	Ceramics	17-2131.00	Materials Engineers
15.10330	Metallurgic Engineer	17-2131.00	Materials Engineers
15.10340	Plastics Engineer	17-2131.00	Materials Engineers
15.10350	Polymer Engineer	17-2131.00	Materials Engineers
15.10360	Textile Engineer	17-2131.00	Materials Engineers
15.20000	Professional Engineering Pathway		
15.20010	Statistician	15-2041.00	Statisticians
15.20020	Standards Writing	27-3042.00	Technical Writers
15.20030	Human Factors	99-9999.00	Insufficient information to classify
15.20040	Application Engineer	17-2199.00	Engineers, All Other
15.20050	Instrumentation	17-2141.00	Mechanical Engineers
15.20060	Project Manager	11-1021.00	General and Operations Managers
15.20060	Project Manager	11-3021.00	Computer and Information Systems Managers
15.20070	Licensing Engineer	99-9999.00	Insufficient information
15.20080	Research and Design Engineer	99-9999.00	To broad to classify to a specific O*NET occupation
15.20090	Systems Design Engineer	15-1031.00	Computer Software Engineers, Applications
15.20090	Systems Design Engineer	15-1032.00	Computer Software Engineers, Systems Software
15.20100	Product Design Engineer	99-9999.00	To broad to classify to a specific O*NET occupation
15.20110	Prototype Engineer	99-9999.00	To broad to classify to a specific O*NET occupation
15.20120	Materials Lab and Supply Engineer	99-9999.00	To broad to classify to a specific O*NET occupation
15.20130	Engineering Research	99-9999.00	To broad to classify to a specific O*NET occupation
15.20140	Civil Engineering	17-2051.00	Civil Engineers
15.20150	Construction Engineer	17-2051.00	Civil Engineers
15.20160	Structural Engineer	17-2051.00	Civil Engineers
15.20170	Environmental Engineer	17-2081.00	Environmental Engineers
15.20180	Mining Engineer	17-2151.00	Mining and Geological Engineers, Including Mining Safety Engineers
15.20190	Surveying	17-3031.01	Surveying Technicians
15.20200	Geothermal Engineer	17-2051.00	Civil Engineers
15.20210	Civil Drafters	17-3011.02	Civil Drafters

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15.20220	Architectural Drafters	17-3011.01	Architectural Drafters
15.20230	Architectural Engineer	17-2051.00	Civil Engineers
15.20240	Chemical Engineering	17-2041.00	Chemical Engineers
15.20250	Petroleum Engineer	17-2171.00	Petroleum Engineers
15.20260	Medical Engineer	17-2031.00	Biomedical Engineers
15.20270	Pharmaceutical Engineer	17-2199.00	Engineers, All Other
15.20280	Biological Engineering	17-2031.00	Biomedical Engineers
15.20290	Biotechnology Engineer	17-2031.00	Biomedical Engineers
15.20300	Biomedical Engineer	17-2031.00	Biomedical Engineers
15.20310	Agricultural Engineering	17-2021.00	Agricultural Engineers
15.20320	Marine Engineering	17-2121.01	Marine Engineers
15.20330	Ocean Engineer	17-2121.01	Marine Engineers
15.20340	Naval Engineer	17-2121.01	Marine Engineers
15.20350	Information Technologies	15-1031.00	Computer Software Engineers, Applications
15.20350	Information Technologies	15-1032.00	Computer Software Engineers, Systems Software
15.20350	Information Technologies	15-1041.00	Computer Support Specialists
15.20350	Information Technologies	15-1051.00	Computer Systems Analysts
15.20350	Information Technologies	15-1061.00	Database Administrators
15.20350	Information Technologies	15-1071.00	Network and Computer Systems Administrators
15.20350	Information Technologies	15-1071.01	Computer Security Specialists
15.20350	Information Technologies	15-1081.00	Network Systems and Data Communications Analysts
15.20360	Computer Engineer	17-2061.00	Computer Hardware Engineers
15.20360	Computer Engineer	15-1031.00	Computer Software Engineers, Applications
15.20360	Computer Engineer	15-1032.00	Computer Software Engineers, Systems Software
15.20370	Networking Engineer	15-1081.00	Network Systems and Data Communications Analysts
15.20380	Computer Scientist	15-1011.00	Computer and Information Scientists, Research
15.20390	Telecommunications	17-2071.00	Electrical Engineers
15.20400	Data Engineer	15-1061.00	Database Administrators
15.20410	Software Engineer	15-1031.00	Computer Software Engineers, Applications
15.20410	Software Engineer	15-1032.00	Computer Software Engineers, Systems Software
15.20420	Aerospace Engineering	17-2011.00	Aerospace Engineers
15.20430	Thermal Engineer	17-2011.00	Aerospace Engineers
15.20440	Rocket Scientist	17-2011.00	Aerospace Engineers

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15.20450	Transportation Engineering	99-9999.00	To broad to classify to a specific O*NET occupation
15.20460	Automotive Engineer	17-2141.00	Mechanical Engineers
15.20470	Traffic Engineer	17-2071.00	Electrical Engineers
15.20480	Nuclear Engineering	17-2161.00	Nuclear Engineers
15.20490	Nuclear Energy Generation	17-2161.00	Nuclear Engineers
15.30000	Science and Mathematics Pathway		
15.30010	Geoscientist	19-2042.00	Geoscientists, Except Hydrologists and Geographers
15.30010	Geoscientist	19-2043.00	Hydrologists
15.30020	Marine scientist	19-2043.00	Hydrologists
15.30030	Environmental scientist	19-2041.00	Environmental Scientists and Specialists, Including Health
15.30040	Expert systems scientist	99-9999.00	Insufficient information to classify
15.30050	Atmospheric scientist	19-2021.00	Atmospheric and Space Scientists
15.30060	Conservation scientist	19-1031.00	Conservation Scientists
15.30070	Quality control scientist	99-9999.00	No comparable O*NET occupation
15.30080	Space scientist	19-2021.00	Atmospheric and Space Scientists
15.30090	Polymer scientist	19-2032.00	Materials Scientists
15.30100	Protein scientist	19-2031.00	Chemists
15.30110	Materials scientist	19-2032.00	Materials Scientists
15.30120	Optical scientist	19-2012.00	Physicists
15.30130	Chemist	19-2031.00	Chemists
15.30140	Dye chemist	19-2031.00	Chemists
15.30150	Biochemist	19-1021.01	Biochemists
15.30160	Inorganic chemist	19-2031.00	Chemists
15.30170	Research chemist	19-2031.00	Chemists
15.30180	Analytical Chemist	19-2031.00	Chemists
15.30190	Organic chemist	19-2031.00	Chemists
15.30200	Radio chemist	19-2031.00	Chemists
15.30210	Nuclear chemists	19-2031.00	Chemists
15.30220	Statistician	15-2041.00	Statisticians
15.30230	Applied mathematician	15-2021.00	Mathematicians
15.30240	Mathematics	15-2021.00	Mathematicians
15.30250	Numerical analyst	15-2021.00	Mathematicians

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15.30260	Economist	19-3011.00	Economists
15.30270	Ecologist	19-1023.00	Zoologists and Wildlife Biologists
15.30280	Cosmologist	19-2021.00	Atmospheric and Space Scientists
15.30290	Endocrinologist	19-1042.00	Medical Scientists, Except Epidemiologists
15.30300	Photonist	19-2012.00	Physicists
15.30310	Zoologist	19-1023.00	Zoologists and Wildlife Biologists
15.30320	Genetisist	19-1029.00	Biological scientist,All Other
15.30330	Spectroscopist	19-4031.00	Chemical Technicians
15.30340	Toxicologist	19-1042.00	Medical Scientists, Except Epidemiologists
15.30350	Mycologist	19-1029.00	Biological scientist,All Other
15.30360	Xenobiologist	19-1029.00	Biological scientist,All Other
15.30370	Herpetologist	19-1023.00	Zoologists and Wildlife Biologists
15.30380	Ichthyologist	19-1023.00	Zoologists and Wildlife Biologists
15.30390	Metallurgist	17-2131.00	Materials Engineers
15.30400	Ornithologist	19-1023.00	Zoologists and Wildlife Biologists
15.30410	Protozoologist	19-1023.00	Zoologists and Wildlife Biologists
15.30420	Mammologist	19-1023.00	Zoologists and Wildlife Biologists
15.30430	Nanobiologist	19-1029.00	Biological scientist,All Other
15.30440	Paleontologist	19-2042.00	Geoscientists, Except Hydrologists and Geographers
15.30450	Botanist	19-1099.00	Life Scientist, All Other
15.30460	Nutritionist	29-1031.00	Dietitians and Nutritionists
15.30470	Meteorologist	19-2021.00	Atmospheric and Space Scientists
15.30480	Hydrologist	19-2043.00	Hydrologists
15.30490	Electronmicroscopist	19-1022.00	Microbiologists
15.30500	Microbial Physiologist	19-1022.00	Microbiologists
15.30510	Physicist	19-2012.00	Physicists
15.30520	Geologist	19-2042.01	Geologists
15.30530	Archeologist	19-3091.02	Archeologists
15.30540	Anthropologist	19-3091.01	Anthropologists
15.30550	Geophysicist	19-2042.01	Geologists
15.30560	Astrologist	27-2099.00	Entertainers and Performers, Sports and Related Workers, All Other
15.30570	Astrophysicist	19-2012.00	Physicists
15.30580	Astronomer	19-2011.00	Astronomers

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15.30590	Crystallographer	19-2042.01	Geologists
15.30600	Demographer	19-3099.00	Social Scientist and Related Workers, All Other
15.30610	Cryptographer	15-2021.00	Mathematicians
15.30620	Oceanographer	19-2042.00	Geoscientists, Except Hydrologists and Geographers
15.30630	Science teacher Lab Technician	25-1194.00	Vocational Education Teachers Postsecondary
15.30640	Nuclear technician	19-4051.00	Nuclear Technicians
15.30650	Technologist	99-9999.00	To broad to classify to a specific O*NET occupation
15.30660	CAD support	17-3013.00	Mechanical Drafters
15.30670	Scientific visualization / graphics expert	27-1024.00	Graphic Designers
15.30680	Communications technologist	27-4011.00	Audio and Video Equipment Technicians
15.30680	Communications technologist	27-4012.00	Broadcast Technicians
15.30680	Communications technologist	27-4013.00	Radio Operators
15.30680	Communications technologist	27-4014.00	Sound Engineering Technicians
15.30690	Cartographer	17-3031.00	Surveying and Mapping Technicians
15.30700	Vacuum technologist	19-4099.00	Life, Physical, and Social Science Technicians, All Other
15.30710	Technical writer	27-3042.00	Technical Writers
15.30720	Programmer	15-1021.00	Computer Programmers
15.30730	Materials analyst	19-2032.00	Materials Scientists