Chemistry Education Report

CIP 40.0501

Cochise, Pima, SC

Chemistry, General

CIP 2010: A general program that focuses on the scientific study of the composition and behavior of matter, including its micro- and macro-structure, the processes of chemical change, and the theoretical description and laboratory simulation of these phenomena.

Target Occupations

299 Jobs (2016) 31% below National average		6.	6.6% \$45.24/h		/hr
		% Change (2017-2022) Nation: 3.5%		Median Hourly Earnings Nation: \$44.62/hr	
Occupation	2017 Jobs	Annual Openings	Median Hourly Earnings	Growth (2017 - 2022)	Location Quotient (2017)
Natural Sciences Managers	205	6	\$52.29/hr	4.88%	1.20
Chemists	98	4	\$30.01/hr	11.22%	0.37

^{*} Target Occupations - Settings

Occupational Programs						
37.00	964.00	13.00				
Programs (2015)	Completions (2015)	Openings (2015)				
CIP Code	Program	Completions (2011)	(2012)	(2013)	(2014)	(2015)
27.0101	Mathematics, General	115	118	125	108	126
30.1901	Nutrition Sciences	104	117	111	121	119
40.0807	Optics/Optical Sciences	108	100	100	87	99
26.0101	Biology/Biological Sciences, General	71	71	85	73	89
26.0502	Microbiology, General	74	72	53	80	76
26.1501	Neuroscience	6	9	24	42	72
40.0501	Chemistry, General	80	67	91	69	66
26.0202	Biochemistry	14	24	51	47	65
40.0601	Geology/Earth Science, General	37	43	49	50	48
26.1310	Ecology and Evolutionary Biology	47	44	53	47	48
40.0801	Physics, General	43	49	46	35	39
40.0201	Astronomy	21	16	18	18	19
40.0605	Hydrology and Water Resources Science	12	19	23	14	16
26.1201	Biotechnology	2	1	6	14	15
26.1001	Pharmacology	5	10	8	7	12
40.0401	Atmospheric Sciences and Meteorology, General	8	4	12	4	10
27.0301	Applied Mathematics, General	9	13	11	21	10
27.0501	Statistics, General	3	9	12	8	10
40.0203	Planetary Astronomy and Science	3	4	4	2	7
26.0702	Entomology	3	5	5	4	6
26.0305	Plant Pathology/Phytopathology	6	6	6	1	4
40.0404	Meteorology	0	2	3	4	3
26.1102	Biostatistics	0	1	3	0	3
26.0503	Medical Microbiology and Bacteriology	0	0	0	0	1
40.0699	Geological and Earth Sciences/Geosciences, Other	1	2	0	1	1
26.0401	Cell/Cellular Biology and Histology	0	0	0	0	0
26.1401	Molecular Medicine	4	1	0	0	0
26.0804	Animal Genetics	0	0	0	0	0
26.0403	Anatomy	0	0	0	0	0
26.0707	Animal Physiology	0	0	0	0	0
26.0910	Pathology/Experimental Pathology	0	0	0	0	0
30.1801	Natural Sciences	0	0	1	1	0
30.1001	Biopsychology	1	0	0	0	0
26.0499	Cell/Cellular Biology and Anatomical Sciences, Other	0	0	0	0	0
26.0701	Zoology/Animal Biology	0	0	0	0	0
26.1301	Ecology	0	0	0	0	0
26.0508	Microbiology and Immunology	5	0	0	0	0

Programs by Institution						
CIP Code	Title	Institution	Award Level	Completions (2015)		
26.0101	Biology/Biological Sciences, General	Tohono O'Odham Community College	Award of at least 1 but less than 2 academic years	3		
26.0101	Biology/Biological Sciences, General	Cochise County Community College District	Associates degree	9		
26.0101	Biology/Biological Sciences, General	Tohono O'Odham Community College	Associates degree	2		
26.0101	Biology/Biological Sciences, General	Pima Community College	Associates degree	0		
26.0101	Biology/Biological Sciences, General	University of Arizona	Bachelors degree	75		
26.0101	Biology/Biological Sciences, General	University of Arizona	Masters degree	0		
26.0202	Biochemistry	University of Arizona	Bachelors degree	61		
26.0202	Biochemistry	University of Arizona	Masters degree	1		
26.0202	Biochemistry	University of Arizona	Doctors degree	3		
26.0305	Plant Pathology/Phytopathology	University of Arizona	Masters degree	3		
26.0305	Plant Pathology/Phytopathology	University of Arizona	Doctors degree	1		
26.0401	Cell/Cellular Biology and Histology	University of Arizona	Bachelors degree	0		
26.0401	Cell/Cellular Biology and Histology	University of Arizona	Masters degree	0		
26.0401	Cell/Cellular Biology and Histology	University of Arizona	Doctors degree	0		
26.0403	Anatomy	University of Arizona	Masters degree	0		
26.0403	Anatomy	University of Arizona	Doctors degree	0		
26.0499	Cell/Cellular Biology and Anatomical Sciences, Other	University of Arizona	Masters degree	0		
26.0499	Cell/Cellular Biology and Anatomical Sciences, Other	University of Arizona	Doctors degree	0		
26.0502	Microbiology, General	University of Arizona	Bachelors degree	73		
26.0502	Microbiology, General	University of Arizona	Masters degree	3		
26.0502	Microbiology, General	University of Arizona	Doctors degree	0		
26.0503	Medical Microbiology and Bacteriology	Pima Community College	Associates degree	0		
26.0503	Medical Microbiology and Bacteriology	University of Arizona	Bachelors degree	0		
26.0503	Medical Microbiology and Bacteriology	University of Arizona	Postbaccalaureate certificate	1		
26.0503	Medical Microbiology and Bacteriology	University of Arizona	Masters degree	0		
26.0503	Medical Microbiology and Bacteriology	University of Arizona	Doctors degree	0		
26.0508	Microbiology and Immunology	University of Arizona	Doctors degree	0		
26.0701	Zoology/Animal Biology	University of Arizona	Bachelors degree	0		
26.0702	Entomology	University of Arizona	Masters degree	2		
26.0702	Entomology	University of Arizona	Doctors degree	4		
26.0707	Animal Physiology	University of Arizona	Bachelors degree	0		

26.0707	Animal Physiology	University of Arizona	Masters degree	0
26.0707	Animal Physiology	University of Arizona	Doctors degree	0
26.0804	Animal Genetics	University of Arizona	Masters degree	0
26.0804	Animal Genetics	University of Arizona	Doctors degree	0
26.0910	Pathology/Experimental Pathology	University of Arizona	Masters degree	0
26.0910	Pathology/Experimental Pathology	University of Arizona	Doctors degree	0
26.1001	Pharmacology	University of Arizona	Masters degree	4
26.1001	Pharmacology	University of Arizona	Doctors degree	8
26.1102	Biostatistics	University of Arizona	Masters degree	3
26.1201	Biotechnology	Pima Community College	Award of at least 1 but less than 2 academic years	3
26.1201	Biotechnology	University of Arizona	Masters degree	12
26.1301	Ecology	University of Arizona	Bachelors degree	0
26.1301	Ecology	University of Arizona	Masters degree	0
26.1301	Ecology	University of Arizona	Doctors degree	0
26.1310	Ecology and Evolutionary Biology	University of Arizona	Bachelors degree	35
26.1310	Ecology and Evolutionary Biology	University of Arizona	Masters degree	9
26.1310	Ecology and Evolutionary Biology	University of Arizona	Doctors degree	4
26.1401	Molecular Medicine	University of Arizona	Masters degree	0
26.1401	Molecular Medicine	University of Arizona	Doctors degree	0
26.1501	Neuroscience	University of Arizona	Bachelors degree	69
26.1501	Neuroscience	University of Arizona	Masters degree	0
26.1501	Neuroscience	University of Arizona	Doctors degree	3
27.0101	Mathematics, General	Cochise County Community College District	Associates degree	3
27.0101	Mathematics, General	University of Arizona	Bachelors degree	110
27.0101	Mathematics, General	University of Arizona-South	Bachelors degree	2
27.0101	Mathematics, General	University of Arizona	Masters degree	2
27.0101	Mathematics, General	University of Arizona	Doctors degree	9
27.0301	Applied Mathematics, General	University of Arizona	Masters degree	6
27.0301	Applied Mathematics, General	University of Arizona	Doctors degree	4
27.0501	Statistics, General	University of Arizona	Postbaccalaureate certificate	3
27.0501	Statistics, General	University of Arizona	Masters degree	5
27.0501	Statistics, General	University of Arizona	Doctors degree	2
30.1001	Biopsychology	University of Arizona	Postbaccalaureate certificate	0
30.1801	Natural Sciences	University of Arizona	Bachelors degree	0
30.1901	Nutrition Sciences	University of Arizona	Bachelors degree	116
30.1901	Nutrition Sciences	University of Arizona	Masters degree	3
30.1901	Nutrition Sciences	University of Arizona	Doctors degree	0
40.0201	Astronomy	University of Arizona	Bachelors degree	11
40.0201	Astronomy	University of Arizona	Masters degree	3
40.0201	Astronomy	University of Arizona	Doctors degree	5
40.0203	Planetary Astronomy and Science	University of Arizona	Masters degree	1

Planetary Astronomy and Science	University of Arizona	Doctors degree	6
Atmospheric Sciences and Meteorology, General	University of Arizona	Bachelors degree	0
Atmospheric Sciences and Meteorology, General	University of Arizona	Masters degree	3
Atmospheric Sciences and Meteorology, General	University of Arizona	Doctors degree	7
Meteorology	University of Arizona	Masters degree	3
Meteorology	University of Arizona	Doctors degree	0
Chemistry, General	Cochise County Community College District	Associates degree	1
Chemistry, General	University of Arizona	Bachelors degree	34
Chemistry, General	University of Arizona	Masters degree	6
Chemistry, General	University of Arizona	Doctors degree	25
Geology/Earth Science, General	University of Arizona	Bachelors degree	37
Geology/Earth Science, General	University of Arizona	Masters degree	2
Geology/Earth Science, General	University of Arizona	Doctors degree	9
Hydrology and Water Resources Science	University of Arizona	Bachelors degree	7
Hydrology and Water Resources Science	University of Arizona	Masters degree	6
Hydrology and Water Resources Science	University of Arizona	Doctors degree	3
Geological and Earth Sciences/Geosciences, Other	University of Arizona	Masters degree	1
Physics, General	Cochise County Community College District	Associates degree	1
Physics, General	University of Arizona	Bachelors degree	24
Physics, General	University of Arizona	Masters degree	6
	·	ŭ	8
Optics/Optical Sciences	University of Arizona	Bachelors degree	27
Optics/Optical Sciences	University of Arizona	Postbaccalaureate certificate	5
Optics/Optical Sciences	University of Arizona		37
Optics/Optical Sciences	University of Arizona	Doctors degree	30
	Science Atmospheric Sciences and Meteorology, General Atmospheric Sciences and Meteorology, General Atmospheric Sciences and Meteorology, General Meteorology, General Meteorology Meteorology Chemistry, General Chemistry, General Chemistry, General Chemistry, General Chemistry, General Chemistry, General Geology/Earth Science, General Geology/Earth Science, General Hydrology and Water Resources Science Hydrology and Water Resources Science Hydrology and Water Resources Science Geological and Earth Sciences/Geosciences, Other Physics, General Physics, General Physics, General Physics, General Optics/Optical Sciences Optics/Optical Sciences	Atmospheric Sciences and Meteorology, General Meteorology Meteorology University of Arizona Meteorology University of Arizona Meteorology University of Arizona Cochise County Community College District University of Arizona Chemistry, General University of Arizona Chemistry, General University of Arizona Chemistry, General University of Arizona Geology/Earth Science, General Geology/Earth Science, General Hydrology and Water Resources Science Hydrology and Earth Sciences/Geosciences, Other Physics, General Physics, General Physics, General University of Arizona Physics, General University of Arizona	Science Atmospheric Sciences and Meteorology, General Atmospheric Sciences and Meteorology Meteorology University of Arizona Masters degree Cochise County Community College District Chemistry, General University of Arizona Bachelors degree Chemistry, General University of Arizona Masters degree Geology/Earth Science, General Geology/Earth Science, General University of Arizona Masters degree University of Arizona Masters degree Mydrology and Water Resources Science Hydrology and Water Resources Science University of Arizona Masters degree University of Arizona Masters degree Destrict Physics, General University of Arizona Masters degree University of Arizona Masters degree University of Arizona Masters degree Destrict Doctors degree Doctors degree University of Arizona Masters degree Doctors degree

Regional Completions by Award Level

	Award Level	Completions (2015)	Percent
)	Associates degree	1	1.5%
	Bachelors degree	34	51.5%
	Masters degree	6	9.1%
	Doctors degree	25	37.9%
	Award of less than 1 academic year	0	0.0%
	Award of at least 1 but less than 2 academic years	0	0.0%
	Award of at least 2 but less than 4 academic years	0	0.0%
	Postbaccalaureate certificate	0	0.0%
	Post-masters certificate	0	0.0%

^{*} Regional Completions by Award Level - Settings

Regional Completions by Institution

Institution	Certificates (2015)	Degrees (2015)	Total Completions (2015)
University of Arizona	0	65	65
Cochise County Community College District	0	1	1

^{*} Regional Completions by Institution - Settings

Appendix A - Data Sources and Calculations

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

State Data Sources

This report uses state data from the following agencies: Arizona Department of Administration, Office of Employment and Population Statistics