Computer Science
Education Report

CIP 11.0701

Cochise, Pima, SC

Computer Science

CIP 2010: A program that focuses on computer theory, computing problems and solutions, and the design of computer systems and user interfaces from a scientific perspective. Includes instruction in the principles of computational science, computer development and programming, and applications to a variety of end-use situations.

Target Occupations

11,108		4.8%		$35.88/hr	
Jobs (2016)		**% Change (2017-2022)**		**Median Hourly Earnings**	
5% above National average		Nation: 7.7%		Nation: $41.77/hr	

Occupation	2017 Jobs	Annual Openings	Median Hourly Earnings	Growth (2017 - 2022)	Location Quotient (2017)
Software Developers, Applications	2,760	68	$39.75/hr	5.00%	1.10
Computer User Support Specialists	2,187	66	$21.49/hr	8.32%	1.05
Software Developers, Systems Software	2,090	35	$44.58/hr	1.05%	1.62
Computer and Information Systems Managers	1,173	27	$48.55/hr	5.46%	1.04
Computer Occupations, All Other	825	15	$37.81/hr	1.58%	1.10
Computer Programmers	607	16	$33.60/hr	-0.82%	0.63
Computer Network Support Specialists	583	15	$23.65/hr	6.00%	0.92
Web Developers	527	18	$22.38/hr	9.68%	0.96
Computer Network Architects	226	8	$39.46/hr	7.96%	0.48
Information Security Analysts	175	5	$31.99/hr	8.00%	0.60
Computer and Information Research Scientists	73	2	$55.83/hr	4.11%	0.84

* Target Occupations - Settings

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Occupational Programs

CIP Code	Program	Completions (2011)	(2012)	(2013)	(2014)	(2015)
21.00 Programs (2015)	710.00 Completions (2015)	610.00 Openings (2015)				
52.1201	Management Information Systems, General	70	142	141	129	152
11.0701	Computer Science	94	116	99	142	140
11.0103	Information Technology	62	76	94	84	121
11.0901	Computer Systems Networking and Telecommunications	119	160	133	70	60
11.0101	Computer and Information Sciences, General	88	103	70	46	48
11.1002	System, Networking, and LAN/WAN Management/Manager	3	8	18	36	38
11.1001	Network and System Administration/Administrator	0	16	17	38	32
01.0106	Agricultural Business Technology	22	11	11	17	26
11.0501	Computer Systems Analysis/Analyst	16	12	15	12	24
52.0205	Operations Management and Supervision	39	58	35	38	23
11.1003	Computer and Information Systems Security/Information Assurance	36	29	47	18	22
11.1006	Computer Support Specialist	3	6	3	5	9
11.0401	Information Science/Studies	5	15	15	8	7
11.0201	Computer Programming/Programmer, General	7	14	14	3	6
11.0801	Web Page, Digital/Multimedia and Information Resources Design	2	3	4	5	2
11.0299	Computer Programming, Other	0	0	0	0	0
11.0199	Computer and Information Sciences, Other	0	0	0	0	0
14.0901	Computer Engineering, General	0	0	0	0	0
11.0301	Data Processing and Data Processing Technology/Technician	15	16	25	5	0
11.1004	Web/Multimedia Management and Webmaster	0	0	5	0	0
11.0803	Computer Graphics	2	6	7	8	0

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Programs by Institution

CIP Code	Title	Institution	Award Level	Completions (2015)
01.0106	Agricultural Business Technology	University of Arizona	Bachelors degree	26
11.0101	Computer and Information Sciences, General	Cochise County Community College District	Award of less than 1 academic year	5
11.0101	Computer and Information Sciences, General	Brown Mackie College-Tucson	Award of less than 1 academic year	0
11.0101	Computer and Information Sciences, General	Pima Community College	Award of less than 1 academic year	0
11.0101	Computer and Information Sciences, General	Brown Mackie College-Tucson	Associates degree	0
11.0101	Computer and Information Sciences, General	Cochise County Community College District	Associates degree	0
11.0101	Computer and Information Sciences, General	Pima Community College	Associates degree	0
11.0101	Computer and Information Sciences, General	University of Arizona	Bachelors degree	43
11.0101	Computer and Information Sciences, General	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.0101	Computer and Information Sciences, General	Brown Mackie College-Tucson	Bachelors degree	0
11.0101	Computer and Information Sciences, General	University of Arizona	Masters degree	0
11.0101	Computer and Information Sciences, General	University of Arizona	Doctors degree	0
11.0103	Information Technology	Cochise County Community College District	Award of less than 1 academic year	0
11.0103	Information Technology	ITT Technical Institute-Tucson	Associates degree	0
11.0103	Information Technology	University of Phoenix-Southern Arizona Campus	Associates degree	0
11.0103	Information Technology	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.0103	Information Technology	University of Arizona	Bachelors degree	0
11.0103	Information Technology	University of Arizona	Masters degree	121
11.0199	Computer and Information Sciences, Other	Pima Community College	Associates degree	0
11.0201	Computer Programming/Programmer, General	Cochise County Community College District	Award of less than 1 academic year	0
11.0201	Computer Programming/Programmer, General	Cochise County Community College District	Award of at least 1 but less than 2 academic years	0
11.0201	Computer Programming/Programmer, General	ITT Technical Institute-Tucson	Associates degree	6
11.0201	Computer Programming/Programmer, General	Cochise County Community College District	Associates degree	0
11.0201	Computer Programming/Programmer, General	University of Phoenix-Southern Arizona Campus	Bachelors degree	0

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11.0299	Computer Programming, Other	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.0301	Data Processing and Data Processing Technology/Technician	Cochise County Community College District	Award of less than 1 academic year	0
11.0301	Data Processing and Data Processing Technology/Technician	Pima Community College	Award of less than 1 academic year	0
11.0301	Data Processing and Data Processing Technology/Technician	Cochise County Community College District	Associates degree	0
11.0401	Information Science/Studies	Pima Community College	Award of less than 1 academic year	0
11.0401	Information Science/Studies	Brookline College-Tucson	Award of less than 1 academic year	0
11.0401	Information Science/Studies	Cochise County Community College District	Award of at least 1 but less than 2 academic years	0
11.0401	Information Science/Studies	Cochise County Community College District	Associates degree	7
11.0401	Information Science/Studies	Brookline College-Tucson	Associates degree	0
11.0501	Computer Systems Analysis/Analyst	Pima Community College	Award of less than 1 academic year	0
11.0501	Computer Systems Analysis/Analyst	Pima Community College	Award of at least 1 but less than 2 academic years	10
11.0501	Computer Systems Analysis/Analyst	Pima Community College	Associates degree	14
11.0501	Computer Systems Analysis/Analyst	Tohono O'Odham Community College	Associates degree	0
11.0501	Computer Systems Analysis/Analyst	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.0701	Computer Science	Cochise County Community College District	Associates degree	3
11.0701	Computer Science	University of Arizona	Bachelors degree	110
11.0701	Computer Science	University of Arizona-South	Bachelors degree	6
11.0701	Computer Science	University of Arizona	Masters degree	13
11.0701	Computer Science	University of Arizona	Doctors degree	8
11.0801	Web Page, Digital/Multimedia and Information Resources Design	Pima Community College	Award of less than 1 academic year	0
11.0801	Web Page, Digital/Multimedia and Information Resources Design	The Art Institute of Tucson	Award of less than 1 academic year	0
11.0801	Web Page, Digital/Multimedia and Information Resources Design	Cochise County Community College District	Award of less than 1 academic year	0
11.0801	Web Page, Digital/Multimedia and Information Resources Design	Brown Mackie College-Tucson	Award of less than 1 academic year	0
11.0801	Web Page, Digital/Multimedia and Information Resources Design	The Art Institute of Tucson	Award of at least 1 but less than 2 academic years	0
11.0801	Web Page, Digital/Multimedia and Information Resources Design	Pima Community College	Award of at least 1 but less than 2 academic years	0
11.0801	Web Page, Digital/Multimedia and Information Resources Design	ITT Technical Institute-Tucson	Associates degree	0

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11.0801	Web Page, Digital/Multimedia and Information Resources Design	The Art Institute of Tucson	Associates degree	0
11.0801	Web Page, Digital/Multimedia and Information Resources Design	University of Arizona	Bachelors degree	1
11.0801	Web Page, Digital/Multimedia and Information Resources Design	The Art Institute of Tucson	Bachelors degree	1
11.0801	Web Page, Digital/Multimedia and Information Resources Design	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.0803	Computer Graphics	The Art Institute of Tucson	Bachelors degree	0
11.0901	Computer Systems Networking and Telecommunications	Cochise County Community College District	Award of less than 1 academic year	2
11.0901	Computer Systems Networking and Telecommunications	Pima Community College	Award of less than 1 academic year	0
11.0901	Computer Systems Networking and Telecommunications	Cochise County Community College District	Award of at least 1 but less than 2 academic years	0
11.0901	Computer Systems Networking and Telecommunications	Pima Community College	Associates degree	53
11.0901	Computer Systems Networking and Telecommunications	Cochise County Community College District	Associates degree	5
11.0901	Computer Systems Networking and Telecommunications	ITT Technical Institute-Tucson	Associates degree	0
11.0901	Computer Systems Networking and Telecommunications	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.1001	Network and System Administration/Administrator	Pima Community College	Award of less than 1 academic year	21
11.1001	Network and System Administration/Administrator	Cochise County Community College District	Award of less than 1 academic year	6
11.1001	Network and System Administration/Administrator	Pima Community College	Associates degree	0
11.1001	Network and System Administration/Administrator	Brown Mackie College-Tucson	Associates degree	0
11.1001	Network and System Administration/Administrator	Brown Mackie College-Tucson	Bachelors degree	5
11.1001	Network and System Administration/Administrator	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.1002	System, Networking, and LAN/WAN Management/Manager	Cochise County Community College District	Award of less than 1 academic year	0
11.1002	System, Networking, and LAN/WAN Management/Manager	Cochise County Community College District	Award of at least 1 but less than 2 academic years	0
11.1002	System, Networking, and LAN/WAN Management/Manager	ITT Technical Institute-Tucson	Associates degree	38
11.1002	System, Networking, and LAN/WAN Management/Manager	Cochise County Community College District	Associates degree	0
11.1003	Computer and Information Systems Security/Information Assurance	Cochise County Community College District	Award of less than 1 academic year	0
11.1003	Computer and Information Systems Security/Information Assurance	Cochise County Community College District	Award of at least 1 but less than 2 academic years	1
11.1003	Computer and Information Systems Security/Information Assurance	Cochise County Community College District	Associates degree	4

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11.1003	Computer and Information Systems Security/Information Assurance	ITT Technical Institute-Tucson	Bachelors degree	17
11.1003	Computer and Information Systems Security/Information Assurance	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.1003	Computer and Information Systems Security/Information Assurance	University of Arizona	Postbaccalaureate certificate	0
11.1004	Web/Multimedia Management and Webmaster	Pima Community College	Award of less than 1 academic year	0
11.1004	Web/Multimedia Management and Webmaster	Cochise County Community College District	Award of less than 1 academic year	0
11.1004	Web/Multimedia Management and Webmaster	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
11.1006	Computer Support Specialist	Pima Community College	Award of less than 1 academic year	0
11.1006	Computer Support Specialist	Brown Mackie College-Tucson	Associates degree	9
11.1006	Computer Support Specialist	Brown Mackie College-Tucson	Bachelors degree	0
14.0901	Computer Engineering, General	University of Arizona	Bachelors degree	0
52.0205	Operations Management and Supervision	University of Arizona	Bachelors degree	23
52.0205	Operations Management and Supervision	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
52.1201	Management Information Systems, General	University of Phoenix-Southern Arizona Campus	Award of less than 1 academic year	0
52.1201	Management Information Systems, General	University of Arizona	Bachelors degree	149
52.1201	Management Information Systems, General	University of Phoenix-Southern Arizona Campus	Bachelors degree	0
52.1201	Management Information Systems, General	University of Arizona	Postbaccalaureate certificate	3
52.1201	Management Information Systems, General	University of Phoenix-Southern Arizona Campus	Masters degree	0
52.1201	Management Information Systems, General	University of Arizona	Masters degree	0

Regional Completions by Award Level

	Award Level	Completions (2015)	Percent	
●	Associates degree	3	2.1%	▪
●	Bachelors degree	116	82.9%	▬▬▬▬▬
●	Masters degree	13	9.3%	▪
●	Doctors degree	8	5.7%	▪
	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	131	131
University of Arizona-South	0	6	6
Cochise County Community College District	0	3	3

* 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

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