

Computer Information Systems Education Report

CIP 11.0401

Cochise, Pima, SC

Information Science/Studies

CIP 2010: A program that focuses on the theory, organization, and process of information collection, transmission, and utilization in traditional and electronic forms. Includes instruction in information classification and organization; information storage and processing; transmission, transfer, and signaling; communications and networking; systems planning and design; human interfacing and use analysis; database development; information policy analysis; and related aspects of hardware, software, economics, social factors, and capacity

Target Occupations

| | 4,139 Jobs (2016) 29% above National average | 2.5% % Change (2017-2022) Nation: 7.4% | \$44.52/hr Median Hourly Earnings Nation: \$52.87/hr | | |
|----------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------|---------------------------------|
| Occupation | 2017 Jobs | Annual Openings | Median Hourly Earnings | Growth (2017 - 2022) | Location Quotient (2017) |
| 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 and Information Research Scientists | 73 | 2 | \$55.83/hr | 4.11% | 0.84 |

* Target Occupations - Settings


| Occupational Programs | | | | | | |
|------------------------------|-----------------------------------------------------------|--------------------|--------|--------|--------|--------|
| 11.00 | 529.00 | 200.00 | | | | |
| Programs (2015) | Completions (2015) | Openings (2015) | | | | |
| CIP Code | Program | Completions (2011) | (2012) | (2013) | (2014) | (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 |
| 11.0101 | Computer and Information Sciences, General | 88 | 103 | 70 | 46 | 48 |
| 11.1001 | Network and System Administration/Administrator | 0 | 16 | 17 | 38 | 32 |
| 52.0205 | Operations Management and Supervision | 39 | 58 | 35 | 38 | 23 |
| 11.0401 | Information Science/Studies | 5 | 15 | 15 | 8 | 7 |
| 11.0201 | Computer Programming/Programmer, General | 7 | 14 | 14 | 3 | 6 |
| 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 |

| Programs by Institution | | | | |
|--------------------------------|--------------------------------------------|-----------------------------------------------|------------------------------------|--------------------|
| CIP Code | Title | Institution | Award Level | Completions (2015) |
| 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 | Pima Community College | Award of less than 1 academic year | 0 |
| 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 | 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 | Brown Mackie College-Tucson | Associates degree | 0 |
| 11.0101 | Computer and Information Sciences, General | University of Arizona | Bachelors degree | 43 |
| 11.0101 | Computer and Information Sciences, General | Brown Mackie College-Tucson | Bachelors degree | 0 |
| 11.0101 | Computer and Information Sciences, General | University of Phoenix-Southern Arizona Campus | 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 |
| 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 |
| 11.0701 | 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 |
| 11.1001 | 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 | Brown Mackie College-Tucson | Associates degree | 0 |
| 11.1001 | Network and System Administration/Administrator | Pima Community College | 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 |
| 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 | 7 | 100.0%  |
| 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% |
| Bachelors degree | 0 | 0.0% |
| Postbaccalaureate certificate | 0 | 0.0% |
| Masters degree | 0 | 0.0% |
| Post-masters certificate | 0 | 0.0% |
| Doctors degree | 0 | 0.0% |

* Regional Completions by Award Level - Settings

Regional Completions by Institution

| Institution | Certificates (2015) | Degrees (2015) | Total Completions (2015) |
|-------------------------------------------|------------------------|-------------------|--------------------------------|
| Cochise County Community College District | 0 | 7 | 7 |
| Pima Community College | 0 | 0 | 0 |
| Brookline College-Tucson | 0 | 0 | 0 |

* *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