

Computer Systems Analysts

Occupational Profile



IS THIS FOR YOU?

Work Interests are described in the following categories (compatible with Holland's Model) by people who tend to succeed in this career:

- **Conventional** – You are an "organizer". Keeping things neat and organized is important to you. You like working with charts and reports, and work well with power and authority.
- **Investigative** – You are a "thinker". When you have a problem, you like to analyze it and look at different ways to solve it. You like to work by yourself, and you don't like explaining your ideas to other people.
- **Realistic** – You are a "doer". You like physical activities and projects. You like to find the answers to problems by doing hands-on work instead of talking about solutions.

Work Values are aspects of work that are satisfying to you. The following work values are generally associated with this career.

- **Achievement** – It's very important to you that your work allows you to use your best abilities. You want to see the results of your work and get a feeling of accomplishment.
- **Independence** – It's very important to you that your work allows you to make decisions on your own. You want to try out your own ideas and work with little supervision.

Aptitudes reflect a person's ability to acquire skills and knowledge. The following aptitudes are important for success in the career:

- **General Learning Ability**
- **Verbal Aptitude**
- **Numerical Aptitude**
- **Clerical Perception**

SKILLS YOU NEED

Basic Skills:

- Reading Comprehension
 - Active Listening
 - Writing
 - Speaking
 - Mathematics
- Critical Thinking
- Active Learning
- Monitoring

Transferable Skills (applicable in other careers):

High level

- Designing Systems
- Giving advice on computer programs and data
 - Planning project activities
 - Preparing technical or research reports
 - Processing data on computers
- Working as a member of a data processing team

Workplace Skills:

High level

- Complex Problem Solving
- Judgment and Decision Making
 - Quality Control Analysis
 - Time Management

Medium level

- Coordination
- Equipment Selection
 - Installation
 - Instructing
- Operation and Control
- Operation Monitoring
- Operations Analysis
 - Persuasion
 - Programming
 - Repairing
- Service Orientation
- Systems Analysis
- Systems Evaluation
- Technology Design
- Troubleshooting

WHAT THEY DO

Analyzes business, scientific, or technical problems and coordinates the installation of appropriate computer programs and operating systems. Belongs to the Information Technology cluster and Network Systems and Programming and Software Development pathways.

Additional skills for this occupation may be found at <http://www.iowaworkforcedevelopment.gov/career-exploration-resources>

ESTIMATED & PROJECTED EMPLOYMENT

Occupational Title	2012 Estimated Employment	2022 Projected Employment	2012-22 Employment Change	Annual Growth Rate (%)	Total Annual Openings
Total, All Occupations	1,758,205	1,955,480	197,275	1.1	61,665
Computer & Mathematical Occupations	33,470	40,560	7,085	2.1	1,275
Computer Systems Analysts	5,260	6,910	1,650	3.1	250

Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0>

2015 WAGE & SALARY (\$)

Occupational Title	Average Wage	Average Salary	Entry Wage	Entry Salary	Experienced Wage	Experienced Salary
Total, All Occupations	19.77	41,122	9.55	19,858	24.88	51,755
Computer & Mathematical Occupations	34.36	71,470	21.43	44,571	40.83	84,919
Computer Systems Analysts	37.27	77,529	25.50	53,040	43.16	89,773

Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0>

EDUCATION & TRAINING

Education	Work Experience	Job Training
Bachelor's Degree	None	None

When hiring computer systems analysts, employers usually prefer applicants who have at least a bachelor's degree. For more technically complex jobs, people with graduate degrees are preferred. For jobs in a technical or scientific environment, employers often seek applicants who have at least a bachelor's degree in a technical field, such as computer science, information science, applied mathematics, engineering, or the physical sciences. For jobs in a business environment, employers often seek applicants with at least a bachelor's degree in a business-related field such as management information systems (MIS). Increasingly, employers are seeking individuals who have a master's degree in business administration (MBA) with a concentration in information systems. Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0> and <https://secure.ihaveaplaniowa.gov/>

NATIONAL CAREER READINESS CERTIFICATE (NCRC)

Skill	Median Skill Level
Applied Mathematics	3
Locating Information	4
Reading for Information	5

This ACT-developed credential demonstrates achievement and a certain level of workplace employability skills. The greater the score, the greater the skill level (Bronze = 3, Silver = 4, Gold = 5, Platinum = 6).

Source: <http://www.act.org/workkeys/analysis/occup.html>



PRIMARY INDUSTRY SECTORS

(Where are Computer Systems Analysts Employed?)

Professional, Scientific, and Technical Services
Insurance Carriers
Credit Intermediation
Management of Companies
Educational Services
Telecommunications
Publishing

Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0>

ADDITIONAL SOURCES:

This workforce product was funded by a grant by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner. This publication was produced by the Labor Market and Workforce Information Division of Iowa Workforce Development. Revisions and/or corrections made when necessary. Inquiries may be directed to Brent Paulson at 515.281.3439 or Brent.Paulson@iwd.iowa.gov. Visit www.iowalmi.gov to obtain the latest workforce data and trends including this document. Published 12/2015.