

Occupational Profile



Information Security Analysts

OVERVIEW

Plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. May ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses. Belongs to the Information Technology career cluster and Network Systems and career pathways.

SKILLS & KNOWLEDGE NEEDED

Basic Skills:

- Reading Comprehension
- Complex Problem Solving
- Active Listening
- Speaking
- Critical Thinking

Technology Skills:

- Data Base Management System Software
- Network Monitoring Software
- Object or Component Oriented Development Software
- Operating System Software
- Transaction Security and Virus Protection Software

Knowledge:

- Computers and Electronics
- Telecommunications
- Administration and Management
- English Language
- Education and Training

DOES THIS DESCRIBE YOU?

Work Interests involve descriptive categories (compatible with Holland's Model) attributed to success in this career:

- **Conventional**—Enjoy following set procedures and routines developed through higher authority; includes working with data and details more than with ideas.
- **Realistic**—Involves work activities that include practical, hands-on problems and solutions; often dealing with plants, animals, and real-world materials like wood, tools, and machinery.
- **Investigative**—Involves working with ideas requiring an extensive amount of research, fact finding, problem solving, and thought analysis.

Work Styles depict worker characteristics conducive for this career:

- **Integrity**
- **Analytical Thinking**
- **Initiative**
- **Stress Tolerance**
- **Dependability**

Work Values are associated with aspects of work that provide satisfaction in this career:

- **Support**—depict worker characteristics conducive for this career:
- **Working Conditions**—Job security; good working conditions.
- **Independence**—Autonomy; working on your own.

Aptitudes reflect an ability to acquire skills and knowledge for success in this career:

- **Written Comprehension**
- **Oral Comprehension**
- **Problem Sensitivity**
- **Deductive Reasoning**
- **Inductive Reasoning**

ESTIMATED & PROJECTED EMPLOYMENT

Occupational Title	2014 Estimated Employment	2024 Projected Employment	2014-24 Employment Change	Annual Growth Rate (%)	Total Annual Openings
Total, All Occupations	1,795,100	1,949,240	154,140	0.9	58,145
Computer & Mathematical Occupations	33,550	39,630	6,080	1.8	1,140
Information Security Analysts	1,775	2,480	700	3.9	95

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

2015 WAGE & SALARY (\$)

Occupational Title	Mean Wage	Mean Salary	Entry Wage	Entry Salary	Exp Wage	Exp Salary
Total All Occupations	20.93	43,539	10.09	20,991	26.35	54,813
Computer & Mathematical Occupations	35.88	74,629	21.29	44,287	43.17	89,800
Information Security Analysts	35.71	74,273	23.24	48,339	41.94	87,240

Source: <https://www.iowaworkforcedevelopment.gov/occupational-employment-and-wages>

EDUCATION & TRAINING

Education	Work Experience	Job Training
Bachelor's Degree	1 to 5 years	None

Many employers desire applicants possessing a bachelor's degree in a related field, such as computer science or information systems. Relevant experience may substitute for education.

Sources: <https://www.iowaworkforcedevelopment.gov/occupational-projections> and https://www.bls.gov/emp/ep_education_training_system.htm

NATIONAL CAREER READINESS CERTIFICATE (NCRC)

Skill	Median Skill Level	Minimum Skill Level	Maximum Skill Level
Applied Mathematics	5	4	7
Locating Information	6	6	6
Reading for Information	6	6	6
Applied Technology	n.a.	n.a.	n.a.
Business Writing	3	3	3
Workplace Observation	5	5	5
Listening for Understanding	3	2	3

An ACT assessment-based credential issued in determining essential work skills needed for employment success across industries and occupations. The greater the score, the greater the skill level (Bronze = 3, Silver = 4, Gold = 5, Platinum = 6 & higher). Source: <http://www.act.org/content/act/en/products-and-services/workkeys-for-employers/assessments.html>

PRIMARY INDUSTRY SECTORS

(Where are Information Security Analysts Employed?)

Insurance Carriers
Professional, Scientific, & Technical
Credit Intermediation

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



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. Updates, revisions, and/or corrections made periodically. 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 9/2017.