

# Information Security Analysts

## Occupational Profile

### WHAT THEY DO

Plans, coordinates and implements security measures for information systems to regulate access to computer data files and prevent unauthorized modification, destruction or disclosure of information. Belongs to the Information Technology cluster and Network Systems and Information Support and Services pathways.

### IS THIS FOR YOU?

#### Basic Skills:

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

#### Transferable Skills (applicable in other careers):

##### High level

- Giving advice on computer programs and data
- Investigating data to solve problems
- Preparing electronic data files
- Processing data on computers
- Working as a member of a data processing team

#### Workplace Skills:

##### High level

- Instructing
- Judgment and Decision Making
- Operations Analysis
- Systems Analysis
- Systems Evaluation
- Time Management
- Troubleshooting

##### Medium level

- Complex Problem Solving
- Coordination
- Equipment Maintenance
- Equipment Selection
- Installation
- Management of Financial, Material, and Personnel Resources
- Negotiation
- Operation and Control
- Operation Monitoring
- Quality Control Analysis
- Repairing
- Service Orientation
- Social Perceptiveness
- Technology Design



### SKILLS YOU NEED

**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.
- **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.
- **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.

**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.
- **Recognition**—It's very important to you that your work satisfies your need for prestige and leadership opportunities, as well as opportunities for advancement.
- **Relationships**—It's very important to you that you have friendly co-workers. You would like to be of service to others without compromising your sense of right and wrong.
- **Support**—It's very important to you to know the company stands behind its workers and has competent, considerate and fair management.
- **Working Conditions**—It's very important to you that your work satisfies your needs in areas like salary, job security and your working style preferences, such as working alone, staying busy all the time or having variety in your work tasks.
- **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**
- **Clerical Perception**

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

Source: <https://secure.ihaveaplaniowa.gov/>

## 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
Information Security Analysts	1,945	2,800	850	4.4	115

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
Information Security Analysts	35.33	73,484	23.82	49,539	41.08	85,456

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

## EDUCATION & TRAINING

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

Many employers prefer to hire applicants with some formal college education. A bachelor's degree in computer science or information systems is a prerequisite for some jobs; other jobs, however, may require only a computer-related associate degree. And for some jobs, relevant computer experience and certifications may substitute for formal education. Source: <http://www.iowaworkforcedevelopment.gov/occupational-projections-0> and <https://secure.ihaveaplaniowa.gov/>

## NATIONAL CAREER READINESS CERTIFICATE (NCRC)

Skill	Median Skill Level
Applied Mathematics	n.a.
Locating Information	n.a.
Reading for Information	n.a.

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 Information Security Analysts Employed?)

Insurance Carriers  
Professional, Scientific, & Technical  
Credit Intermediation

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

## ADDITIONAL SOURCES:

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