

Information Security

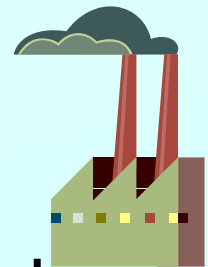
Is It the Field of Study for You?

A Presentation by the CIS Department
Prince George's Community College

Changing Careers



- ▶ Two hundred years ago, you probably would have made a living in agriculture.
- ▶ One hundred years ago, you most likely would have worked in a factory.
- ▶ Today, we live in the Information Age and almost everyone has a job somehow connected to information stored in digital form on a network.



What's Important?

- ▶ During the agricultural age, crops and the tools to produce them were the most important asset.
- ▶ During the industrial age, manufactured goods and the factories that produced them were the most important asset.
- ▶ Today, information is a key asset of almost every organization and individual!



Spying and Theft Updated

- ▶ Once spying was person against person, country against country.
- ▶ Today, spies sit on fiber-optic cables and our wi-fi networks.
- ▶ They steal data and information without breaking any glass.
- ▶ **Keeping data confidential is one core mission of information security (think identity theft!)**

Incorrect Information

- ▶ Wrong information is worse than no information.
- ▶ When users of information lose confidence that the information is accurate, they'll never rely on it.
- ▶ Have you ever tried to fix an inaccurate credit report? It's not easy!
- ▶ **Maintaining data integrity is also a core mission of information security.**

Information Must Be Available When Needed

- ▶ Information security doesn't mean locking everything down.
- ▶ If people don't have the information they need, they can't do their jobs.
- ▶ Information security professionals must be able to balance access to information and the risk of damage.
- ▶ A third core mission of Information Security is making information available when needed.

Information Security Professionals

- ▶ Information Security is one of the fastest growing careers in Information Technology.
- ▶ Safeguarding systems is a **mission critical** role in every organization and in our country.
- ▶ Organizations were caught without trained security professionals when the Internet made their information vulnerable to attack.
- ▶ Entry level Information Assurance specialists often have Associate's degrees.

A.A.S. Degree in Information Security

- ▶ PGCC offers an Associate's Degree in Information Security.
- ▶ Our coursework is certified by the National Security Agency as meeting the National Standard for Information Systems Security Professionals (Standard 4011).
- ▶ Students are encouraged to do internships as part of their studies.

Certificates in Information Security

- ▶ While working on an Information Security A.A.S. degree, students may complete two non-overlapping certificates, both of which fully count toward the degree:
 - Information Security Certificate
 - Cisco CCNA Preparation Certificate (offered by the Engineering Technology department)
- ▶ Typically a certificate will contain the technical courses in the selected field of study and not the general education courses required in the A.A.S. degree.

Transferring to a 4-Year Institution

- ▶ The A.A.S. degree at PGCC easily transfers to a number of leading 4-year institutions by what is called an articulation agreement.
- ▶ Some of these institutions are:
 - University of Maryland University College (UMUC)
 - Capitol College
 - Towson University
 - University of Baltimore
- ▶ Students planning to transfer should meet with advisor from the 4-year institution.

Information Security May Be the Right Field for You If

- ▶ You can juggle multiple responsibilities.
- ▶ You are detail oriented.
- ▶ You enjoy problem solving.
- ▶ You like working with computers.
- ▶ You would enjoy fighting cyber-crime and safeguarding information against attack.
- ▶ You want to be involved in a career that benefits society.
- ▶ You enjoy learning new skills.

Prepare for a Career in IS

- ▶ Study at PGCC in the newly opened High Technology Center.
- ▶ Attend small classes in a learning-centered environment with involved teachers.
- ▶ Visit <http://academic.pgcc.edu/cios/security.htm>
- ▶ You'll find information on the program and how to complete it in two years.
- ▶ You may also contact SSullivan@pgcc.edu with any questions.

Other Degree & Certificate Choices

- ▶ The CIS Department offers students six certificate choices, all of which lead to the Computer Information Systems A.A.S. degree:
 - Computer Graphics
 - Computer Programming
 - Database Systems
 - Networking
 - Technical Support
 - Web Technology
- ▶ Financial Aid available for all degrees

We welcome your questions!



High Technology Center, PCGG, Opened for Classes Spring, 2008