

Bachelor of Science in Information Technology (BSIT)

Concentration in **Information Assurance and Security**



OVERVIEW

Private and public sector entities depend on information technology leaders to conceptualize, implement, and manage high quality, secure information systems to support their organizations. AIU® offers an industry-relevant BSIT program with a concentration in Information Assurance and Security designed to help students learn about the types of information technology security used in business today, as well as the practices that should be in place in organizations to ensure security.

CURRICULUM INCLUDES

In this specialized curriculum, you can work to develop experience in the major areas of system and network assurance and security, which includes wireless security, coping with insider threats and hardening operating systems.

This real-world concentration can help you develop a focused, industry-specific knowledge base common to IT professionals in the field of information assurance and security. For example:

Ethical Hacking and Penetration Testing: students can study intrusion detection, server security (with emphasis on the Windows operating system and server), and related advanced administration tasks on enterprise servers.

Telecommunications and Network Infrastructure Security: students can explore network security principles and implementation techniques, and will have the opportunity to study the issues relevant to the design, analysis, and implementation of trusted enterprise-level information systems.

Principles and Methods in Cryptographic Security: students can study how to determine appropriate cryptographic targets and methods, digital-key management, cryptographic vulnerabilities and implementation of effective cryptographic methodologies to secure enterprise-wide information systems.

WE CAN HELP YOU

- Articulate ethical, legal, and professional responsibilities of information technology professionals to include societal and global impact
- Communicate technical information verbally, written, and graphically in various professional settings
- Design and maintain computer-based solutions based on user or system requirements, best practices and industry-relevant tools and technologies
- Recommend computing solutions based on evaluation of current technologies, principles, and theories
- Function effectively on teams in various roles appropriate for the information technology discipline

* Transfer credit is evaluated on an individual basis. Not all credits are eligible to transfer. See the University Catalog for transfer credit policies.

COURSEWORK

OUTCOMES

WHY AIU?

AIU offers a streamlined, real-world curriculum and flexibility designed to help you schedule school around your life, not the other way around.

Along with industry-relevant undergraduate and graduate degree programs, our industry-focused concentrations allow in-depth study of the field.

To accommodate busy lives, we offer full- and part-time program options and transfer-in credit* for eligible college, work and military experience, which could cut down on the time it takes to earn a degree.



AIUniv.edu

Bachelor of Science in Information Technology (BSIT)

Concentration in Information Assurance and Security

The AIU Bachelor of Science in Information Technology (BSIT) degree program offers a dynamic curriculum focused on industry-relevant technology trends and applications designed to help students learn how to evaluate emerging technologies in the application of appropriate information systems to manage and achieve organizational goals and objectives.

FOCUS ON YOUR SPECIFIC AREA OF INTEREST

By studying key topics in Information Assurance and Security to complete the upper division's core and concentration requirements, you have an opportunity to focus your studies in the areas of digital security, information collection and preservation, and security-system creation.

A SPECIALIZED CURRICULUM TAUGHT BY EXPERIENCED PROFESSIONALS

In addition to a quality curriculum based on industry-relevant standards, AIU's BSIT with a focus in Information Assurance and Security is taught by experienced faculty, many who have worked in the fields they teach. This offers you an opportunity to learn from professionals who can share their understanding of the qualities and skills utilized in today's marketplace for information assurance and security professionals.

GENERAL EDUCATION COURSES

ENGL106	English Composition I	4.5
ENGL107	English Composition II	4.5
MATH125	General College Mathematics	4.5
MATH133	College Algebra	4.5
UNIV103	Academic and Professional Success	4.5
UNIV106	Technology and Information Literacy	4.5
UNIV109	Interpersonal Communication	4.5
	Humanities (2 courses)	9
	Natural Sciences (2 courses)	9
	Social and Behavioral Sciences (2 courses)	9

Total General Education Requirements 58.5

CORE COURSES

ITCO101	Discovering Information Technology	4.5
ITCO103	Introduction to Computer and Network Hardware	4.5
ITCO105	Information Technology and Society	4.5
ITCO107	Developing Professional Communications	4.5
ITCO211	Introduction to Operating Systems	4.5
ITCO221	Fundamentals of Programming and Logic	4.5
ITCO231	Introduction to Databases	4.5
ITCO251	Network Infrastructure Basics	4.5
ITCO299	Comprehensive IT Project	4.5
ITCO361	Information Technology Security	4.5
ITCO385	Introduction to Mobile Technologies and the Internet of Things	4.5

CORE COURSES (CONTINUED)

ITCO391	Human/Computer Interfaces and Interactions	4.5
ITCO498	Program Capstone for IT	4.5

Total Core Requirements 58.5

ELECTIVES

Select 7 undergraduate elective courses	31.5
Select 3 undergraduate Information Technology Elective (ITCO/ITDI/ITAS/ITNA/ITSD) courses	13.5

Total Elective Requirements 45

INFORMATION ASSURANCE AND SECURITY COURSES

ITAS362	Introduction to Information Assurance and Information Security	4.5
ITAS363	Telecommunications and Network Infrastructure Security	4.5
ITAS367	Principles and Methods in Cryptographic Security	4.5
ITAS465	Ethical Hacking and Penetration Testing	4.5

Total Concentration Requirements 18

Total Bachelor's Degree Requirements 180