

Bachelor of Science in Information Technology (BSIT)

Specialization in **Software Analysis and Development**



OVERVIEW

From mission-critical business systems to e-commerce and the Internet, IT is not only an industry in its own right but also a fundamental building block of all other industries. AIU® offers an industry-current BSIT program with an in-depth specialization in Software Analysis and Development designed to help students develop an ability to use programming techniques such as Try Catch blocks, If blocks, looping and arrays and much more.

COURSEWORK

CURRICULUM INCLUDES

In this specialized curriculum, you can learn about the architectures for integrating systems, XML Web services and middleware, network programming, message and queuing services, and low-level data communications.

This real-world specialization offers the opportunity for in-depth study, with more than half of your courses in your area of interest. It can help you develop a focused knowledge base common to IT professionals in the field of software analysis and development. For example:

E-commerce Development: students can study business solutions that use electronic commerce in a variety of ways, including tools for e-commerce, security, payments, marketing, and legal and ethical considerations.

Software Quality Control and Testing: students can learn about tools and techniques used to ensure software quality control.

Software Development for Mobile Devices: students can acquire an understanding of the methodologies and skills used to develop software for mobile devices, including an examination of user-interface design for small screens, data synchronization, memory management and principles of good design for mobile computing.

OUTCOMES

WE CAN HELP YOU

- Summarize details of essential computer concepts
- Use an operating system interface to access, add, troubleshoot and configure hardware, and manage files
- Implement a relational database management system utilizing the concepts of database design and data modeling
- Design and develop business applications using programming languages, tools and software development methodologies

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 degrees, our industry-focused specializations 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.



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* Not all credits are eligible to transfer. See the University Catalog for transfer credit policies.

Bachelor of Science in Information Technology (BSIT)

Specialization in Software Analysis and Development

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 software analysis and development to complete the upper division's core specialization requirements, you have an opportunity to acquire industry-current knowledge of programming and logic, including topics such as variables and scope, data types, control structures, and development environments.

A SPECIALIZED CURRICULUM TAUGHT BY EXPERIENCED PROFESSIONALS

In addition to a quality curriculum based on industry-relevant standards, AIU's BSIT with a specialized focus in Software Analysis and Development 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 sought in today's competitive marketplace for software analysis and development 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
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
ITCO361	Information Technology Security	4.5
ITCO381	Introduction to Web Systems and Media	4.5
ITCO391	Human/Computer Interfaces and Interactions	4.5
ITCO327	Introduction to Mobile Technologies and Internet of Things	4.5

CORE COURSES (CONTINUED)

ITCO498	Program Capstone	4.5
MGMT412	Project Management	4.5

Total Core Requirements 58.5

GENERAL ELECTIVE COURSES

GEN ELEC	General Electives	18
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Total General Elective Requirements 18

SOFTWARE ANALYSIS AND DEVELOPMENT SPECIALIZATION

IITCO299	Comprehensive IT Project	4.5
ITCO341	Applications of Discrete Mathematics and Statistics in IT	4.5
ITCO425	System Architecture and Integration	4.5
ITSD 324	Software Quality Control and Testing	4.5
ITSD 325	E-commerce Development	4.5
ITSD 422	System Analysis and Design	4.5
ITSD 322	Object Oriented Application Development I	4.5
ITSD 424	Object Oriented Application Development II	4.5
ITSD 427	Software Development for Mobile Devices	4.5
ITSD 429	Distributed Systems Design and Development	4.5

Total Specialization Requirements 45

Total Bachelor's Degree Requirements 180

For important information about the educational debt, earnings, and completion rates of students who attended this program, go to www.aiuniv.edu/disclosures. AIU cannot guarantee employment or salary. Not all programs are available to residents of all states. 1292779 3-18

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