Online
Bachelor of Science in Information Technology Administration
Application Development Track   120 Credit Hours

Admission Requirements:

- Submit official high school and/or college transcripts.
- Complete the online program application accompanied by a non-refundable processing fee.
- Students are not required to submit ACT or SAT test scores.

Graduation Requirements:
Students must earn a 2.0 GPA or higher to meet graduation requirements and complete at least 33 advanced hours.

Cost:

- Per Credit Hour - $395
- A $300 resource fee will be administered per part of term.
- Total cost of degree program will vary depending on transfer credits.

Locked-In Tuition
Once you enroll in a bachelor's degree program at ACU Online, our Locked-In Tuition plan guarantees you'll pay the same price for your entire program.

Job Outlook in Texas:

196,003 Jobs
Open in 2020*

644,783
Unique Postings (9/16-12/21)

$90,800 per year
Median Earnings

*Filtered by the proportion of the national workforce in these occupations with a Bachelor's degree.
Source Emsi Analyst 2022.

Acquired Skills:

Top Hard Skills

- Computer Science
- Agile Methodology
- SQL (Programming Language)
- Java (Programming Language)

Top Common Skills

- Communications
- Management
- Problem Solving
- Leadership

855-219-7300 | ACU.EDU

2023-2024 Academic Year

Bachelor of Science in Information Technology Administration

Major Requirements:

COMPUTER SCIENCE

CS 115: Introduction to Programming Using Scripting An introduction to computer programming using a scripting language such as Python or PHP, with an emphasis on problem solving and logic. Topics include: variables and constants, arithmetic operations, data input and output, Boolean logic, conditional and iterative program control structures, user-defined functions, simple algorithm design, and debugging strategies.

CS 116: Applied Programming Using Scripting A deeper exploration of computer programming using a scripting language such as Python or PHP, with a greater emphasis on algorithm design. Topics include strings, arrays, and other advanced data types, reading and writing files, modules, exception handling, recursion, regular expressions, and complex algorithm design.

INFORMATION TECHNOLOGY

ITA 121 PC Service and Support 1
This course concentrates on the fundamentals of computer hardware. Students will be able to describe the internal components of a computer, assemble a computer system, and troubleshoot using system tools and diagnostic software. Students will also learn to connect to the Internet and share resources in a network environment.

ITA 122 PC Service and Support 2
Provides an in-depth look at advanced computer maintenance concepts and techniques. Topics include PC development techniques, troubleshooting strategies, advancement of technological development and problem-solving strategies.

IT 220: Introduction to Databases and Database Management Systems A survey of the logical and physical organization of data and their importance in computer processing. Introduces data models, relational database design, and associated ideas. Compares modern DBMS software. Examines data as a strategic organizational resource. Students develop the basic SQL scripting skills necessary to create tables, queries, forms, and reports. Provides initial training towards professional database certification.

IT 221: Fundamentals of Networking and Data Communications A first course in data communications and networking. Topics include: IP networks and services, comparative network configurations and communications protocols, function and purpose of physical network components, resource sharing, client-server systems, administrative issues and tools, and industry standards. Provides initial training towards professional network certification. Laboratory graded and credited with course.

IT 225: Web Technologies An introduction to the development of web pages used to display images, tables, forms, and frames. Topics include HTML, cascading style sheets, server- and client-side scripting, applets, and web databases and security. Also introduces Internet browsers, user computer configurations, standard protocols, XML compatibility, Dynamic HTML, and accessibility issues.

IT 310: Introduction to Computer and Information Security A survey of the fundamental concepts of computer and information security, including policies and technologies used to achieve secure networks, systems, computing facilities, and information resources. Topics include common system vulnerabilities and threats; models and mechanisms for mandatory, discretionary, and role-based access controls; authentication technologies; ethical issues; and related ideas. Provides initial training towards professional database certification.

IT 320: Database Administration A comprehensive presentation of the concepts and techniques of modern database administration. Topics include: system/software evaluation, selection, installation, operations, and maintenance; capacity planning and re-engineering; and utilities and tools for trouble-shooting, backup/ recovery, and performance monitoring/tuning. Discusses approaches and standards for organizing and managing the database resources, users, and technology of an enterprise.

IT 410 Systems Integration and Administration Study and practice in the integration and administration of computer systems. Topics include: resource planning; hardware evaluation, acquisition, installation, and maintenance; file systems; system diagnostics and performance tuning; backup/restore processes; integration of various operating platforms and open source technologies; and user and customer support services. Requires scripting and shell programming.

IT 490: Topics in Information Technology Investigation of an Information Technology topic of current interest. Topics rotate depending on faculty expertise and student interest, with the same topic generally not being offered more than twice.

ITA 405: Systems Development Processes and Methodologies Traditional and Agile processes and methodologies. Overviews traditional system and product life cycle models, requirements gathering, analysis and design strategies, and the Agile philosphy, vocabulary, tools and best practices.

INFORMATION, TECHNOLOGY, AND COMPUTING

ITC 110: Introduction to Information, Technology, and Computing An introduction to the mindsets, concepts, and skills found in the disciplines of the School of Information, Technology, and Computing.

ITC 460: Managing Technical Projects Students apply knowledge in their major area an develop project management skills through oral and written analysis of cases and applied projects. Prerequisite: Course must be taken during the last year of the academic program. A capstone and writing-intensive course.

Bachelor of Science in Information Technology Administration

Application Development Concentration Options:

MATHEMATICS

MATH 131: Calculus for Application Introduction to differential and integral calculus of algebraic, exponential, and logarithmic functions. Emphasis on applications.

MATH: 377: Statistical Methods I Measurement concepts and scales, populations versus samples, descriptive statistics, random variables and their properties, sampling processes and distributions, special probability distributions, confidence intervals on means and variances from samples, hypothesis tests, one-way analysis of variance, linear correlation and regression, estimation of proportions, and introduction to contingency tables.

CS 330: Human-Computer Interaction Introduction to both the programmatic and psychological considerations surrounding shaping the computer tool to the user. The course will cover the details of implementing a graphical user interface, and how to make the interface as user-friendly as possible.

IT 325: Web Application Development Continuation of Web Development I. Topics include: Rapid Application Development; client- and server-side scripting for user and database interaction; session/cookie management; and privacy and integrity issues. Students learn scripting languages such as JavaScript, Perl, and ASP and develop an understanding of the document object model. Emphasizes satisfying client specifications.

ITA 315: Mobile Application Development for Information Technology Students develop applications for mobile computing devices. Includes theory, concepts, and hands-on programming. Assumes a strong programming background.

ELECTIVES
16 hours of electives.

GENERAL EDUCATION/UNIVERSITY REQUIREMENTS
56 hours of general education and university requirements are needed to fulfill this degree, including 9-15 hours of Bible courses. Specific courses will be determined based on a student's incoming transfer credits.

Online
Bachelor of Science in Information Technology Administration
General Track   120 Credit Hours

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Top Common Skills

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2023-2024 Academic Year

Bachelor of Science in Information Technology Administration

Major Requirements:

COMPUTER SCIENCE

CS 115: Introduction to Programming Using Scripting An introduction to computer programming using a scripting language such as Python or PHP, with an emphasis on problem solving and logic. Topics include: variables and constants, arithmetic operations, data input and output, Boolean logic, conditional and iterative program control structures, user-defined functions, simple algorithm design, and debugging strategies.

CS 116: Applied Programming Using Scripting A deeper exploration of computer programming using a scripting language such as Python or PHP, with a greater emphasis on algorithm design. Topics include strings, arrays, and other advanced data types, reading and writing files, modules, exception handling, recursion, regular expressions, and complex algorithm design.

INFORMATION TECHNOLOGY

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IT 225: Web Technologies An introduction to the development of web pages used to display images, tables, forms, and frames. Topics include HTML, cascading style sheets, server- and client-side scripting, applets, and web databases and security. Also introduces Internet browsers, user computer configurations, standard protocols, XML compatibility, Dynamic HTML, and accessibility issues.

IT 310: Introduction to Computer and Information Security A survey of the fundamental concepts of computer and information security, including policies and technologies used to achieve secure networks, systems, computing facilities, and information resources. Topics include common system vulnerabilities and threats; models and mechanisms for mandatory, discretionary, and role-based access controls; authentication technologies; ethical issues; and related ideas. Provides initial training towards professional database certification.

IT 320: Database Administration A comprehensive presentation of the concepts and techniques of modern database administration. Topics include: system/software evaluation, selection, installation, operations, and maintenance; capacity planning and re-engineering; and utilities and tools for trouble-shooting, backup/ recovery, and performance monitoring/tuning. Discusses approaches and standards for organizing and managing the database resources, users, and technology of an enterprise.

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Bachelor of Science in Information Technology Administration

MATHEMATICS

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MATH: 377: Statistical Methods I Measurement concepts and scales, populations versus samples, descriptive statistics, random variables and their properties, sampling processes and distributions, special probability distributions, confidence intervals on means and variances from samples, hypothesis tests, one-way analysis of variance, linear correlation and regression, estimation of proportions, and introduction to contingency tables.

General Concentration Options:
(Choose 3 from the following)

CS 330: Human-Computer Interaction Introduction to both the programmatic and psychological considerations surrounding shaping the computer tool to the user. The course will cover the details of implementing a graphical user interface, and how to make the interface as user-friendly as possible.

IT 325: Web Application Development Continuation of Web Development I. Topics include: Rapid Application Development; client- and server-side scripting for user and database interaction; session/cookie management; and privacy and integrity issues. Students learn scripting languages such as JavaScript, Perl, and ASP and develop an understanding of the document object model. Emphasizes satisfying client specifications.

ITA 315: Mobile Application Development for Information Technology Students develop applications for mobile computing devices. Includes theory, concepts, and hands-on programming. Assumes a strong programming background.

IT 415: Networks and Security Administration Study and practice in administering and securing a multifaceted network and communications infrastructure. Topics include: network standards, protocols, naming systems, configurations, and services; hardware and operating system interoperability; capacity planning and re-engineering; security requirements and procedures; logging and auditing tools; disaster planning; and trouble-shooting and performance tuning. Emphasizes user and client needs.

IT 473: Cybersecurity Policies, Standards, and Compliance A practical survey of cybersecurity policy, standards, and compliance issues. Projects and team projects reinforce learning. Students perform risk assessments and create cyber policies.

ITA 447: Risk and Incident Planning and Response Applies policies, standards, and guidelines in the design and development of Risk Management Plans and Incident Response Plans.

ELECTIVES
16 hours of electives.

GENERAL EDUCATION/UNIVERSITY REQUIREMENTS
56 hours of general education and university requirements are needed to fulfill this degree, including 9-15 hours of Bible courses. Specific courses will be determined based on a student's incoming transfer credits.

Online
Bachelor of Science in Information Technology Administration
Information Assurance Track 120 Credit Hours

Admission Requirements:

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Cost:

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- Java (Programming Language)

Top Common Skills

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- Management
- Problem Solving
- Leadership

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Source Emsi Analyst 2022.

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2022-2023 Academic Year

Bachelor of Science in Information Technology Administration

Major Requirements:

COMPUTER SCIENCE

CSO 115: Introduction to Programming Using Scripting An introduction to computer programming using a scripting language such as Python or PHP, with an emphasis on problem solving and logic. Topics include: variables and constants, arithmetic operations, data input and output, Boolean logic, conditional and iterative program control structures, user-defined functions, simple algorithm design, and debugging strategies.

CSO 116: Applied Programming Using Scripting A deeper exploration of computer programming using a scripting language such as Python or PHP, with a greater emphasis on algorithm design. Topics include strings, arrays, and other advanced data types, reading and writing files, modules, exception handling, recursion, regular expressions, and complex algorithm design.

INFORMATION TECHNOLOGY

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Bachelor of Science in Information Technology Administration

Information Assurance Concentration Options:

MATHEMATICS

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