The Bachelor of Science in Information Technology (BSIT) program provides the knowledge to successfully apply information technology theory and principles to address real world business opportunities and challenges. The program covers fundamental and advanced knowledge in core technologies such as systems integration, web systems, network architecture, database design, information security, programming and other supporting IT principles. The program provides the opportunity to specialize through the selection of University of Phoenix IT academic certificates, aligned to industry certifications, to support IT career goals.

**Required Course of Study**

The Bachelor Of Science In Information Technology requires a minimum of 120 credits, which may come from a combination of required and elective courses.

- **CIS207 Information Systems Fundamentals**
  This course introduces the fundamentals of computer systems and the role of information processing in today's business environment. An overview is presented of information systems, systems development, operating systems and programming, database management, networking and telecommunications, and the Internet. (3 credits)

- **PRG211 Algorithms And Logic For Computer Programming**
  This course provides students with a basic understanding of programming development practices. Concepts covered include the application of algorithms and logic to the design and development of procedural and object oriented computer programs to address the problem solving requirements associated with business information systems. This course will cover procedural programming concepts including data types, controls structures, functional decomposition, arrays, and files, classes and objects. (3 credits)

- **MTH207 Calculus I**
  This course is an introduction to differential calculus. Students explore limits and continuity. They examine the basic concept of differentiation and practice differentiation techniques. Students develop competence applying differentiation to solve problems. Students also examine simple antiderivatives. (4 credits)

- **MTH221 Discrete Math For Information Technology**
  Discrete (as opposed to continuous) mathematics is of direct importance to the fields of Computer Science and Information Technology. This branch of mathematics includes studying areas such as set theory, logic, relations, graph theory, and analysis of algorithms. This course is intended to provide students with an understanding of these areas and their use in the field of Information Technology. (3 credits)

- **WEB240 Web Design Fundamentals**
  This course introduces development tools and techniques used to publish Web pages on the World Wide Web. Students use basic hypertext markup language, scripting and presentational technologies to create web sites with the aid of a software authoring application. Topics include XHTML, CSS, JavaScript, server hosting, site publication, site maintenance and Search Engine Optimization. (3 credits)

- **DBM380 Database Concepts**
  This course covers database concepts. Topics include data analysis, the principal data models with emphasis on the relational model, entity-relationship diagrams, database design, normalization, and database administration. (3 credits)

- **NTC362 Fundamentals Of Networking**
  This course provides a foundation in the basic telecommunications and networking technologies fundamental to the industry and to the broad field of telecommunications. Analog, digital, and radio frequency technologies are covered. Also covered in this course is an introduction to the OSI protocol model, network-switching systems, basics of wireless communications and network security. (3 credits)

- **BSA375 Fundamentals Of Business Systems Development**
  This course introduces the fundamental, logical, and design considerations addressed during system and application software development. It provides a solid background in information systems analysis and design techniques through a combination of theory and application. The Systems Development Life Cycle will be fundamental to the course. (3 credits)

- **CMGT400 Intro To Information Assurance & Security**
  This course is an introduction to information assurance and security in computing technology. Topics include risk management; protecting information in the enterprise; business continuity and disaster recovery planning; threats and remediation; legal, ethical, and professional issues; and considerations within systems development processes. (3 credits)

For more information about this program, including important consumer disclosures, please visit [http://www.phoenix.edu/content/altcloud/en/programs/ge/default/bsit.html](http://www.phoenix.edu/content/altcloud/en/programs/ge/default/bsit.html).
PRG420  Java Programming I
This course introduces object-oriented programming in the context of business applications development. The basics of the Java™ programming language are covered. (3 credits)

CMGT410  Project Planning & Implementation
This course provides the foundation for successful project planning, organization, and implementation within the realm of information technology. The course uses real-world examples and identifies common mistakes and pitfalls in project management. Topics covered include project scoping, estimating, budgeting, scheduling and staffing, tracking and controlling, and software tools for project management. (3 credits)

CMGT445  Application Implementation
This course will cover the process and issues associated with the implementation of a computer application information system. Topics will include the processes associated with sponsor and stakeholder approvals, end user training, technical staff training, conversion from existing application(s) and integration into the information system production environment. This course will also examine the use of development and testing environments and the testing procedures related to the implementation of a computer application information system. (3 credits)