

- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

#### **Degree Requirements for the BSM**

- Completion of a minimum of 120 credits that include the following distribution:
  - A minimum of 45 upper division credits.
  - A minimum of 54 of the 120 credits must be in the general education areas approved by the University.
- A minimum program grade point average (GPA) of 2.0.
- Students holding an associate degree from the University or a regionally or approved nationally accredited, or candidate for accreditation, college or university or equivalent undergraduate degree earned at a recognized foreign institution will have that associate degree emphasis(es) noted on the student's University of Phoenix transcript when the BSM degree is conferred. Students with an associate degree in business, management, arts, general studies, liberal arts, nursing or pre-medicine are not eligible for an emphasis.
- The diploma awarded for this program will read as follows:  
Bachelor of Science in Management

#### **General Education Requirements for the BSM**

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement 6 credits

*(A Track must include COMM 215, equivalent, or higher)*

*(B Track must include: COM 170 and COM 172)*

*Puerto Rico students may not use conversational English to satisfy Communication Arts.*

*Oregon campus students, enrolled in the A Track, must use writing courses to complete the 6 credits of Communication Arts. This does not include Oregon students attending the Online Campus. B Track students will meet this requirement by completing COM 170 and COM 172.*

Mathematics Requirement 6 credits

*(Must include MTH 209, equivalent, or higher)*

Science & Technology Requirement 6 credits

*(B Track must include: SCI 163)*

*Must include at least three (3) credits in the physical or biological sciences*

Humanities Requirement 6 credits

*(B Track must include: HUM 114)*

Social Science Requirement 6 credits

*(B Track must include: PSY 211)*

*Nevada students must complete three (3) credits in Nevada Constitution*

Additional Liberal Arts Requirement 6 credits

*(B Track must include: GEN 195)*

*Puerto Rico students must complete 6 credits of Spanish. Conversational Spanish may not be used. Only Introduction to Spanish, Basic Spanish 1 or higher will satisfy the Spanish requirement. B Track students will have 3 credits applied to the Additional Liberal Arts category and 3 credits applied to the Interdisciplinary component.*

Interdisciplinary Requirement 18 credits

*(B Track must include: FP 120)*

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

#### **General Education Requirements for the BSM for Arkansas Students**

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement(s) 6 credits

*(A Track must include: COMM 215, equivalent, or higher)*

*(B Track must include: COM 170 and COM 172)*

Mathematics Requirement(s) 6 credits

*Must include MTH 220*

Science & Technology Requirement(s) 9 credits

*(B Track must include: SCI 163)*

*Must include CHM 110 and PHY 101 or equivalent transfer coursework with a lab component.*

Humanities Requirement(s) 9 credits

*(B Track students must include: HUM 114)*

Social Science Requirement(s) 9 credits

*(B Track must include: PSY 211)*

*Must include HIS 145 or POL 215 or equivalent transfer coursework with US History or Government content.*

Additional Liberal Arts Requirement(s) 6 credits

*(B Track must include: GEN 195)*

Interdisciplinary Requirement(s) 9 credits

*(B Track students must include: FP 120)*

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

For a description of the preceding general education areas, see the Undergraduate Programs section within this catalog.

#### **Academic Progression Requirements for the BSM**

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application are required to complete the First-Year Sequence (B Track).
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or concentration courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and

- ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course It is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take BCOM 275 Business Communications and Critical Thinking as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements. (e.g., taking COM 172 instead of COMM 215)
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- All undergraduate students must satisfy math and English prerequisites prior to enrolling in any course that requires math or English as a prerequisite.

**Residency Requirements and Course Waivers for the BSM**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 30 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 30 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver with credit for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten (10) years (5 years for IS&T courses) from current program enrollment agreement sign date with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

The 15 credit upper division BSM Business/Management Elective requirement may be satisfied by any of the following means:

- Upper division University of Phoenix Business/Management coursework.
- Upper division Business/Management transfer coursework that is acceptable for transfer and was completed within the past ten (10) years from current program enrollment agreement sign date with a grade of C- or better.

- Upper division Business/Management National Testing Program exams that are acceptable for transfer and were completed within the past ten (10) years from current program enrollment agreement sign date.
- Upper division Business/Management military credits that are acceptable for transfer and were completed within the past ten (10) years from current program enrollment agreement sign date.
- Upper division Business/Management Prior Learning Assessment (PLA) credits awarded to activities completed within the past ten (10) years from current program enrollment agreement sign date.

Through an approved articulation agreement, students who have successfully completed equivalent courses may waive, without credits, up to thirty (30) credits of the Required Course of Study. Students must substitute other upper division coursework to satisfy the upper division credit requirement of their degree program (each program has specific substitution requirements). This policy also applies to upper division courses which are used to fulfill Associate of Arts degree requirements. In order to be granted a waiver, without credit, for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or nationally accredited institution with which the University of Phoenix has an approved articulation agreement.
- The course must have been completed with a grade of "C" (2.0) or better during the effective dates of the approved articulation agreement.
- The course must be approved through the articulation agreement and must be comparable in content and credits to the University course it is replacing.

The following courses in the Required Course of Study may not be waived: BCOM 275, MGT 420, MGT 498.

**Course Descriptions for the BSM**

BCOM 275 ..... 3 credits

**Business Communications and Critical Thinking**

This course introduces students to the foundations of communication in a business setting. Students will develop skills in critical thinking and decision making through the forms of written communication, including memos, emails, business letters, and reports. Other topics include communication ethics and cross-cultural communications, personal communication styles, solving organizational problems, and the evaluation of an organizations strategic direction.

PHL 458 ..... 3 credits

**Creative Minds and Critical Thinking**

In this course students will analyze the thinking process from a critical and creative perspective. The lives of prominent creative thinkers will be examined to identify the social, historical, psychological, and cultural elements that influenced their development. The salient aspects of creativity will be assessed along with the relationship between creativity and critical thinking. Students will apply critical thinking skills to contemporary creative and scientific thought.

ETH 316 ..... 3 credits

**Ethics and Social Responsibility**

This course provides a foundational perspective for ethics and social responsibility in relationship to individuals, organizations, and the community. Emphasis is placed on the inter-related nature of ethics, morality, legal responsibility, and social issues.

LAW 421 .....3 credits

**Contemporary Business Law**

This course reviews the US legal system, common law and its development, organizational structures, and the regulatory environment pertinent to business. Students will learn to critically examine torts, crimes, and business ethics; contracts; business associations (agency, partnerships, corporations); wills, estates, trusts, and other legal entities; securities regulations; and investor protection.

RES 320 .....3 credits

**Foundations of Research**

This is a course introducing the foundations of research. Research principles and the scientific method are applied to professional situations. The course is designed to equip students with an understanding of commonly employed research methodologies that can be utilized to improve productivity and increase customer satisfaction.

PSY 322 .....3 credits

**Consumer Psychology and Research**

This course focuses on consumer behavior and marketing research. Topics include the cognitive processes underlying consumer choice, descriptive consumer characteristics, and environmental consumer behavior. This course emphasizes the implications of consumer behavior on domestic and global marketing communications.

BIS 320 .....3 credits

**Business Information Systems**

This course provides instruction on the use of Business Information Systems. Students apply Microsoft Office tools including word processing, spreadsheet, database, and presentation software to accomplish business objectives. Other topics include application software and the Internet for effective problem solving, use of relevant emerging technologies, and using information across different industries.

ECO 365 .....3 credits

**Principles of Microeconomics**

This course provides students with the basic theories, concepts, terminology, and uses of microeconomics. Students learn practical applications for microeconomics in their personal and professional lives through assimilation of fundamental concepts and analysis of actual economic events.

ACC 300 .....3 credits

**Principles of Accounting**

This course focuses on principles of accounting for the non-accounting student. Emphasis will be placed on the accounting equation and transactions, financial statement preparation and analysis, internal controls, regulatory environment, compliance, and global business implications.

FIN 370 .....3 credits

**Finance for Business**

This course introduces the student to the essential elements of finance for business. Emphasis is placed on financial management, financial markets, and the tools, techniques, and methodologies used in making financial decisions. Topics include: Financial planning, working capital management, capital budgeting, long term financing, and international finance.

MGT 498 ..... 3 credits

**Strategic Management**

This course gives students the opportunity to integrate management concepts and practices to contemporary business strategies, while discussing the theories of strategic management. This course will focus on improving management decision-making and problem-solving skills. Students will create a strategic management plan.

COMM 215 ..... 3 credits

**Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

GEN 200 .....3 credits

**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 101 .....3 credits

**Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 .....3 credits

**Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

MTH 209 .....3 credits

**College Mathematics II**

This course continues the demonstration and examination of various basic algebra concepts that was begun in MTH 208: College Mathematics I. It assists in building skills for performing more complex mathematical operations and problem solving than in earlier courses. These concepts and skills should serve as a foundation for subsequent quantitative business coursework. Applications to real-world problems are emphasized throughout the course. Specific applications to disciplines such as statistics, accounting, finance, and economics are demonstrated and discussed. A variety of other applications, such as geometry, personal finance, science, and engineering, are also demonstrated and discussed.

MTH 220 ..... 3 credits  
**College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

CHM 110 ..... 3 credits  
**Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

PHY 101 ..... 3 credits  
**Fundamentals of Physics**

This course is designed to introduce physics at an entry level by examining the principle laws of physics leading to a conceptual understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and thermodynamics, electricity and magnetism, and waves. Students will apply these principles using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 145 ..... 3 credits  
**The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying an historical perspective to analyze contemporary issues.

POL 215 ..... 3 credits  
**State and Local Political Processes**

This course is designed to introduce students to state and local government structures and processes. Government and business relationships are particularly emphasized. Opportunities are provided for students to observe and interact with state and local government officials and groups and to debate public policy issues in a local or state government meeting setting.

**Bachelor of Science in Management Concentration in Manufacturing Sector**

*The following Bachelor of Science in Management Concentration in Manufacturing Sector (BSM/MAN) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Bachelor of Science in Management (BSM) degree program is designed to develop the professional knowledge and skills of cross functional managers in any organization. The BSM degree enhances skills necessary for improved organizational effectiveness in a dynamic and evolving workplace. The curriculum focuses on the development of management roles. It emphasizes skills necessary to align resources, and to improve communication, productivity, and effectiveness. Through a participative learning environment structured for adult learners, students are taught to manage innovation and apply professional skills and knowledge. Special emphasis can be placed on key management areas, including, leadership, general management, or human resource management based on student preference.

The Manufacturing Sector (MAN) concentration focuses on strategic performance improvement of all business planning, global sourcing and procurement, production, and logistical activities that make up an organization's operations and supply chain. The program highlights the important role that operations and supply chain play in satisfying customer demands and expectations. The program also emphasizes a company's need to develop and maintain a sustainable competitive advantage through the efficient and effective performance of all operations. The program provides the most current content in the manufacturing field as outlined by various specialized manufacturing and supply chain organizations and experts. In addition to courses in the BSB foundation and courses specific to manufacturing, the degree concentration has coursework that stresses key business related knowledge and skill development in the areas of computers and information processing, business law, macro-economics, financial analysis, and marketing.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsm-man>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**BSM/MAN Program Category Requirements - A Track and B Track**

**Communications, 3 total credits**

BCOM 275 ~ ..... 3 credits  
 Business Communications and Critical Thinking  
*(The prerequisite requirement only applies to B Track students)*

**Management, 3 total credits**

PHL 458 ~ ..... 3 credits  
 Creative Minds and Critical Thinking

**Ethics and Social Responsibility, 3 total credits**

ETH 316 ~ .....3 credits  
Ethics and Social Responsibility

**Business Law, 3 total credits**

LAW 421 ~ .....3 credits  
Contemporary Business Law

**Research and Statistics, 3 total credits**

RES 320 ~ .....3 credits  
Foundations of Research

**Marketing, 3 total credits**

PSY 322 ~ .....3 credits  
Consumer Psychology and Research

**Business Information Systems, 3 total credits**

BIS 320 ~ .....3 credits  
Business Information Systems

**Economics, 3 total credits**

ECO 365 ~ .....3 credits  
Principles of Microeconomics

**Accounting, 3 total credits**

ACC 300 ~ .....3 credits  
Principles of Accounting

**Finance, 3 total credits**

FIN 370 ~ .....3 credits  
Finance for Business

**Management Capstone, 3 total credits**

MGT 498~ .....3 credits  
Strategic Management

**Manufacturing Sector Concentration, 15 total credits**

OI 361 ~ .....3 credits  
Innovation, Design, and Creativity for a Competitive Advantage

MGT 420 ~ .....3 credits  
Managing Quality in the Supply Chain

*Students must choose three of the following BSM/MAN Concentration Electives:*

HRM 420 ~ .....3 credits  
Human Resource Risk Management

ISCOM 352 ~ .....3 credits  
Logistics Management

ISCOM 472 ~ .....3 credits  
Lean Enterprise

ISCOM 471 ~ .....3 credits  
Operations Management

ISCOM 473 ~ .....3 credits  
Global Sourcing and Procurement

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for the BSM/MAN**

All applicants are expected to meet the following admissions requirements:

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- South Carolina: Applicants attending a local campus in South Carolina must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit an Associate Degree posted transcript in lieu of the high school documentation. This may include a copy of a transcript or degree verification information from the institution's student website.
- Nevada: Applicants attending a local campus in Nevada must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit a college transcript which documents high school attended and date of completion or a copy of a DD-214 showing high school graduation or equivalency to satisfy this requirement.
- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

**Degree Requirements for the BSM/MAN**

- Completion of a minimum of 120 credits that include the following distribution:
  - A minimum of 45 upper division credits.
  - A minimum of 54 of the 120 credits must be in the general education areas approved by the University.
- A minimum grade point average (GPA) of 2.0.
- Students holding an associate degree from the University or a regionally or approved nationally accredited, or candidate for accreditation, college or university or equivalent undergraduate degree earned at a recognized foreign institution will have that associate degree emphasis(es) noted on the student's University of Phoenix transcript when the BSM degree is conferred, if applicable.
- The diploma awarded for this program will read as follows: Bachelor of Science in Management. Concentrations are reflected on the transcript only.

**General Education Requirements for the BSM/MAN**

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement 6 credits

*(A Track must include COMM 215, equivalent, or higher)*

*(B Track must include: COM 170 and COM 172)*

*Puerto Rico students may not use conversational English to satisfy Communication Arts.*

*Oregon campus students, enrolled in the A Track, must use writing courses to complete the 6 credits of Communication Arts. This does not include Oregon students attending the Online Campus. B Track students will meet this requirement by completing COM 170 and COM 172.*

Mathematics Requirement 6 credits

*(Must include MTH 209, equivalent, or higher)*

Science & Technology Requirement 6 credits

*(B Track must include: SCI 163)*

*Must include at least three (3) credits in the physical or biological sciences*

Humanities Requirement 6 credits

*(B Track must include: HUM 114)*

Social Science Requirement 6 credits

*(B Track must include: PSY 211)*

*Nevada students must complete three (3) credits in Nevada Constitution*

Additional Liberal Arts Requirement 6 credits

*(B Track must include: GEN 195)*

*Puerto Rico students must complete 6 credits of Spanish. Conversational Spanish may not be used. Only Introduction to Spanish, Basic Spanish 1 or higher will satisfy the Spanish requirement. B Track students will have 3 credits applied to the Additional Liberal Arts category and 3 credits applied to the Interdisciplinary component.*

Interdisciplinary Requirement 18 credits

*(B Track must include: FP 120)*

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

**General Education Requirements for the BSM/MAN for Arkansas Students**

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement(s) 6 credits

*(A Track must include: COMM 215, equivalent, or higher)*

*(B Track must include: COM 170 and COM 172)*

Mathematics Requirement(s) 6 credits

*Must include MTH 220*

Science & Technology Requirement(s) 9 credits

*(B Track must include: SCI 163)*

*Must include CHM 110 and PHY 101 or equivalent transfer coursework with a lab component.*

Humanities Requirement(s) 9 credits

*(B Track must include: HUM 114)*

Social Science Requirement(s) 9 credits

*(B Track must include: PSY 211)*

*Must include HIS 145 or POL 215 or equivalent transfer coursework with US History or Government content.*

Additional Liberal Arts Requirement(s) 6 credits

*(B Track must include: GEN 195)*

Interdisciplinary Requirement(s) 9 credits

*(B Track students must include: FP 120)*

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

For a description of the preceding general education areas, see the Undergraduate Programs section within this catalog.

**Academic Progression Requirements for the BSM/MAN**

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application are required to complete the First-Year Sequence (B Track).
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or concentration courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course. It is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take BCOM 275 Business Communications and Critical Thinking as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements. (e.g., taking COM 172 instead of COMM 215)
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.

- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- All undergraduate students must satisfy math and English prerequisites prior to enrolling in any course that requires math or English as a prerequisite.

**Residency Requirements and Course Waivers for the BSM/MAN**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 30 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 30 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver with credit for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten (10) years (5 years for IS&T courses) from current program enrollment agreement sign date with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

Through an approved articulation agreement, students who have successfully completed equivalent courses may waive, without credits, up to thirty (30) credits of the Required Course of Study. Students must substitute other upper division coursework to satisfy the upper division credit requirement of their degree program (each program has specific substitution requirements). This policy also applies to upper division courses which are used to fulfill Associate of Arts degree requirements. In order to be granted a waiver, without credit, for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or nationally accredited institution with which the University of Phoenix has an approved articulation agreement.
- The course must have been completed with a grade of "C" (2.0) or better during the effective dates of the approved articulation agreement.
- The course must be approved through the articulation agreement and must be comparable in content and credits to the University course it is replacing.

The following courses in the Required Course of Study may not be waived: BCOM 275, MGT 420, MGT 498

**Course Descriptions for the BSM/MAN**

BCOM 275 ..... 3 credits

**Business Communications and Critical Thinking**

This course introduces students to the foundations of communication in a business setting. Students will develop skills in critical thinking and decision making through the forms of written communication, including memos, emails, business letters, and reports. Other topics include communication ethics and cross-cultural communications, personal communication styles, solving organizational problems, and the evaluation of an organizations strategic direction.

PHL 458 ..... 3 credits

**Creative Minds and Critical Thinking**

In this course students will analyze the thinking process from a critical and creative perspective. The lives of prominent creative thinkers will be examined to identify the social, historical, psychological, and cultural elements that influenced their development. The salient aspects of creativity will be assessed along with the relationship between creativity and critical thinking. Students will apply critical thinking skills to contemporary creative and scientific thought.

ETH 316 ..... 3 credits

**Ethics and Social Responsibility**

This course provides a foundational perspective for ethics and social responsibility in relationship to individuals, organizations, and the community. Emphasis is placed on the inter-related nature of ethics, morality, legal responsibility, and social issues.

LAW 421 ..... 3 credits

**Contemporary Business Law**

This course reviews the US legal system, common law and its development, organizational structures, and the regulatory environment pertinent to business. Students will learn to critically examine torts, crimes, and business ethics; contracts; business associations (agency, partnerships, corporations); wills, estates, trusts, and other legal entities; securities regulations; and investor protection.

RES 320 ..... 3 credits

**Foundations of Research**

This is a course introducing the foundations of research. Research principles and the scientific method are applied to professional situations. The course is designed to equip students with an understanding of commonly employed research methodologies that can be utilized to improve productivity and increase customer satisfaction.

PSY 322 ..... 3 credits

**Consumer Psychology and Research**

This course focuses on consumer behavior and marketing research. Topics include the cognitive processes underlying consumer choice, descriptive consumer characteristics, and environmental consumer behavior. This course emphasizes the implications of consumer behavior on domestic and global marketing communications.

BIS 320..... 3 credits

#### **Business Information Systems**

This course provides instruction on the use of Business Information Systems. Students apply Microsoft Office tools including word processing, spreadsheet, database, and presentation software to accomplish business objectives. Other topics include application software and the Internet for effective problem solving, use of relevant emerging technologies, and using information across different industries.

ECO 365 ..... 3 credits

#### **Principles of Microeconomics**

This course provides students with the basic theories, concepts, terminology, and uses of microeconomics. Students learn practical applications for microeconomics in their personal and professional lives through assimilation of fundamental concepts and analysis of actual economic events.

ACC 300 ..... 3 credits

#### **Principles of Accounting**

This course focuses on principles of accounting for the non-accounting student. Emphasis will be placed on the accounting equation and transactions, financial statement preparation and analysis, internal controls, regulatory environment, compliance, and global business implications.

FIN 370 ..... 3 credits

#### **Finance for Business**

This course introduces the student to the essential elements of finance for business. Emphasis is placed on financial management, financial markets, and the tools, techniques, and methodologies used in making financial decisions. Topics include: Financial planning, working capital management, capital budgeting, long term financing, and international finance.

MGT 498 ..... 3 credits

#### **Strategic Management**

This course gives students the opportunity to integrate management concepts and practices to contemporary business strategies, while discussing the theories of strategic management. This course will focus on improving management decision-making and problem-solving skills. Students will create a strategic management plan.

COMM 215 ..... 3 credits

#### **Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

GEN 200..... 3 credits

#### **Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 101..... 3 credits

#### **Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300..... 3 credits

#### **Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

MTH 209 ..... 3 credits

#### **College Mathematics II**

This course continues the demonstration and examination of various basic algebra concepts that was begun in MTH 208: College Mathematics I. It assists in building skills for performing more complex mathematical operations and problem solving than in earlier courses. These concepts and skills should serve as a foundation for subsequent quantitative business coursework. Applications to real-world problems are emphasized throughout the course. Specific applications to disciplines such as statistics, accounting, finance, and economics are demonstrated and discussed. A variety of other applications, such as geometry, personal finance, science, and engineering, are also demonstrated and discussed.

MTH 220 ..... 3 credits

#### **College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

CHM 110 ..... 3 credits

#### **Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

PHY 101 .....3 credits  
**Fundamentals of Physics**

This course is designed to introduce physics at an entry level by examining the principle laws of physics leading to a conceptual understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and thermodynamics, electricity and magnetism, and waves. Students will apply these principles using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 145 .....3 credits  
**The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying an historical perspective to analyze contemporary issues.

POL 215 .....3 credits  
**State and Local Political Processes**

This course is designed to introduce students to state and local government structures and processes. Government and business relationships are particularly emphasized. Opportunities are provided for students to observe and interact with state and local government officials and groups and to debate public policy issues in a local or state government meeting setting.

**Course Descriptions for the Manufacturing Sector Concentration**

OI 365 .....3 credits  
**Knowledge Management and Intellectual Capital**

In this course, students are provided the knowledge and skills necessary for effective knowledge management present in today's increasingly innovative and global business environment. Students will be asked to consider a variety of topics critical to an organization's long-term success including, but not limited to innovation, intellectual capital, goodwill, brand recognition, organizational partnerships, and organizational culture.

MGT 420 .....3 credits  
**Managing Quality in the Supply Chain**

This course provides a detailed look at quality management in the company and the supply chain. It addresses the differing theories of quality to include product and process design as well as customer driven quality. This course includes managing supply chain quality through supplier alliances and development in both the services and manufacturing industries.

HRM 420 .....3 credits  
**Human Resource Risk Management**

This course introduces students to risk management in a human resources department context. The course introduces basic risk management concepts that the student can apply to HR responsibilities of an organization to avoid or mitigate potential liabilities. Topics will include health and safety, security, crisis management, legal compliance, employment and discrimination issues.

ISCOM 352 .....3 credits  
**Logistics Management**

This course provides an overview of logistics management within a supply chain operation. This includes an analysis of different modes of transportation, logistics management within the United States, and logistics management in the global market. Special emphasis is placed on transportation and fleet management elements including operations management, information technology, decision support systems, fuel savings strategies, and reverse logistics considerations.

ISCOM 472 .....3 credits  
**Lean Enterprise**

This course provides an overview of lean manufacturing practices within a company and its supply chain. It addresses fundamental practices including flowcharting of business processes, collection and analysis of process performance data and the removal of those activities that are determined to be wasteful or non-essential.

ISCOM 471 .....3 credits  
**Operations Management**

This course provides an overview of operations management. Students will analyze the planning, organizing, controlling, and general management of productive resources in manufacturing and service organizations. This course also addresses the design and control of systems that are responsible for the efficient use of raw materials, labor, equipment, and facilities in the production of customer satisfying products and services.

ISCOM 473 .....3 credits  
**Global Sourcing and Procurement**

This course introduces students to the changing world of purchasing and its relationship to supply chains. It addresses purchasing operations and structures, strategic sourcing processes and the critical supply chain elements of managing supply chain inventory, information systems, as well as performance measurement and evaluation.

### **Bachelor of Science in Management Emphasis in Manufacturing Sector (Maryland-Online)**

The following Bachelor of Science in Management Emphasis in Manufacturing Sector (BSM/MAN) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

The Bachelor of Science in Management (BSM) degree program is designed to develop the professional knowledge and skills of cross functional managers in any organization. The BSM degree enhances skills necessary for improved organizational effectiveness in a dynamic and evolving workplace. The curriculum focuses on the development of management roles. It emphasizes skills necessary to align resources, and to improve communication, productivity, and effectiveness. Through a participative learning environment structured for adult learners, students are taught to manage innovation and apply professional skills and knowledge. Special emphasis can be placed on key management areas, including, leadership, general management, or human resource management based on student preference.

The Manufacturing Sector (MAN) emphasis focuses on strategic performance improvement of all business planning, global sourcing and procurement, production, and logistical activities that make up an organization's operations and supply chain. The program highlights the important role that operations and supply chain play in satisfying customer demands and expectations. The program also emphasizes a company's need to develop and maintain a sustainable competitive advantage through the efficient and effective performance of all operations. The program provides the most current content in the manufacturing field as outlined by various specialized manufacturing and supply chain organizations and experts. In addition to courses in the BSB foundation and courses specific to manufacturing, the degree emphasis has coursework that stresses key business related knowledge and skill development in the areas of computers and information processing, business law, macro-economics, financial analysis, and marketing. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsm-man>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

#### **BSM/MAN Program Category Requirements - A Track and B Track**

##### **Communications, 3 total credits**

BCOM 275 ~ ..... 3 credits  
Business Communications and Critical Thinking  
(The prerequisite requirement only applies to B Track students)

##### **Management, 3 total credits**

PHL 458 ~ ..... 3 credits  
Creative Minds and Critical Thinking

##### **Ethics and Social Responsibility, 3 total credits**

ETH 316 ~ ..... 3 credits  
Ethics and Social Responsibility

##### **Business Law, 3 total credits**

LAW 421 ~ ..... 3 credits  
Contemporary Business Law

##### **Research and Statistics, 3 total credits**

RES 320 ~ ..... 3 credits  
Foundations of Research

##### **Marketing, 3 total credits**

PSY 322 ~ ..... 3 credits  
Consumer Psychology and Research

##### **Business Information Systems, 3 total credits**

BIS 320 ~ ..... 3 credits  
Business Information Systems

##### **Economics, 3 total credits**

ECO 365 ~ ..... 3 credits  
Principles of Microeconomics

##### **Accounting, 3 total credits**

ACC 300 ~ ..... 3 credits  
Principles of Accounting

##### **Finance, 3 total credits**

FIN 370 ~ ..... 3 credits  
Finance for Business

##### **Management Capstone, 3 total credits**

MGT 498~ ..... 3 credits  
Strategic Management

##### **Manufacturing Sector Emphasis, 15 total credits**

OI 361 ~ ..... 3 credits  
Innovation, Design, and Creativity for a Competitive Advantage

MGT 420 ~ ..... 3 credits  
Managing Quality in the Supply Chain

Students must choose three of the following BSM/MAN Emphasis Electives:

HRM 420 ~ ..... 3 credits  
Human Resource Risk Management

ISCOM 352 ~ ..... 3 credits  
Logistics Management

ISCOM 472 ~ ..... 3 credits  
Lean Enterprise

ISCOM 471 ~ ..... 3 credits  
Operations Management

ISCOM 473 ~ ..... 3 credits  
Global Sourcing and Procurement

The University reserves the right to modify the required course of study.

##### **Additional Admission Requirements for the BSM/MAN**

All applicants are expected to meet the following admissions requirements:

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

### Degree Requirements for the BSM/MAN

- Completion of a minimum of 120 credits that include the following distribution:
  - A minimum of 45 upper division credits.
  - A minimum of 54 of the 120 credits must be in the general education areas approved by the University.
- A minimum grade point average (GPA) of 2.0.
- Students holding an associate degree from the University or a regionally or approved nationally accredited, or candidate for accreditation, college or university or equivalent undergraduate degree earned at a recognized foreign institution will have that associate degree emphasis(es) noted on the student's University of Phoenix transcript when the BSM degree is conferred, if applicable.
- The diploma awarded for this program will read as follows: Bachelor of Science in Management. Emphases are reflected on the transcript only.

### General Education Requirements for the BSM/MAN

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement 6 credits

*(A Track must include COMM 215, equivalent, or higher)*

*(B Track must include: COM 170 and COM 172)*

Mathematics Requirement 6 credits

*(Must include MTH 209, equivalent, or higher)*

Science & Technology Requirement 6 credits

*(B Track must include: SCI 163)*

*Must include at least three (3) credits in the physical or biological sciences*

Humanities Requirement 6 credits

*(B Track must include: HUM 114)*

Social Science Requirement 6 credits

*(B Track must include: PSY 211)*

Additional Liberal Arts Requirement 6 credits

*(B Track must include: GEN 195)*

Interdisciplinary Requirement 18 credits

*(B Track must include: FP 120)*

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

For a description of the preceding general education areas, see the Undergraduate Programs section within this catalog.

### Academic Progression Requirements for the BSM/MAN

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application are required to complete the First-Year Sequence (B Track).
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or emphasis courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,

- Regionally or nationally accredited coursework (C- or higher grade),
- University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
- National Testing Programs, and
- ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course It is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take BCOM 275 Business Communications and Critical Thinking as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements. (e.g., taking COM 172 instead of COMM 215)
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- All undergraduate students must satisfy math and English prerequisites prior to enrolling in any course that requires math or English as a prerequisite.

### Residency Requirements and Course Waivers for the BSM/MAN

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 30 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 30 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver with credit for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten (10) years (5 years for IS&T courses) from current program enrollment agreement sign date with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

Through an approved articulation agreement, students who have successfully completed equivalent courses may waive, without credits, up to thirty (30) credits of the Required Course of Study. Students must substitute other upper division coursework to satisfy the upper division credit requirement of their degree program (each program has specific substitution requirements). This policy also applies to upper division courses which are used to fulfill Associate of Arts degree requirements. In order to be granted a waiver, without credit, for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or nationally accredited institution with which the University of Phoenix has an approved articulation agreement.
- The course must have been completed with a grade of "C" (2.0) or better during the effective dates of the approved articulation agreement.
- The course must be approved through the articulation agreement and must be comparable in content and credits to the University course it is replacing.

The following courses in the Required Course of Study may not be waived: BCOM 275, MGT 420, MGT 498

#### **Course Descriptions for the BSM/MAN**

BCOM 275..... 3 credits

##### **Business Communications and Critical Thinking**

This course introduces students to the foundations of communication in a business setting. Students will develop skills in critical thinking and decision making through the forms of written communication, including memos, emails, business letters, and reports. Other topics include communication ethics and cross-cultural communications, personal communication styles, solving organizational problems, and the evaluation of an organization's strategic direction.

PHL 458..... 3 credits

##### **Creative Minds and Critical Thinking**

In this course students will analyze the thinking process from a critical and creative perspective. The lives of prominent creative thinkers will be examined to identify the social, historical, psychological, and cultural elements that influenced their development. The salient aspects of creativity will be assessed along with the relationship between creativity and critical thinking. Students will apply critical thinking skills to contemporary creative and scientific thought.

ETH 316..... 3 credits

##### **Ethics and Social Responsibility**

This course provides a foundational perspective for ethics and social responsibility in relationship to individuals, organizations, and the community. Emphasis is placed on the inter-related nature of ethics, morality, legal responsibility, and social issues.

LAW 421 ..... 3 credits

##### **Contemporary Business Law**

This course reviews the US legal system, common law and its development, organizational structures, and the regulatory environment pertinent to business. Students will learn to critically examine torts, crimes, and business ethics; contracts; business associations (agency, partnerships, corporations); wills, estates, trusts, and other legal entities; securities regulations; and investor protection.

RES 320 ..... 3 credits

##### **Foundations of Research**

This is a course introducing the foundations of research. Research principles and the scientific method are applied to professional situations. The course is designed to equip students with an understanding of commonly employed research methodologies that can be utilized to improve productivity and increase customer satisfaction.

PSY 322 ..... 3 credits

##### **Consumer Psychology and Research**

This course focuses on consumer behavior and marketing research. Topics include the cognitive processes underlying consumer choice, descriptive consumer characteristics, and environmental consumer behavior. This course emphasizes the implications of consumer behavior on domestic and global marketing communications.

BIS 320..... 3 credits

##### **Business Information Systems**

This course provides instruction on the use of Business Information Systems. Students apply Microsoft Office tools including word processing, spreadsheet, database, and presentation software to accomplish business objectives. Other topics include application software and the Internet for effective problem solving, use of relevant emerging technologies, and using information across different industries.

ECO 365 ..... 3 credits

##### **Principles of Microeconomics**

This course provides students with the basic theories, concepts, terminology, and uses of microeconomics. Students learn practical applications for microeconomics in their personal and professional lives through assimilation of fundamental concepts and analysis of actual economic events.

ACC 300 ..... 3 credits

##### **Principles of Accounting**

This course focuses on principles of accounting for the non-accounting student. Emphasis will be placed on the accounting equation and transactions, financial statement preparation and analysis, internal controls, regulatory environment, compliance, and global business implications.

FIN 370..... 3 credits

##### **Finance for Business**

This course introduces the student to the essential elements of finance for business. Emphasis is placed on financial management, financial markets, and the tools, techniques, and methodologies used in making financial decisions. Topics include: Financial planning, working capital management, capital budgeting, long term financing, and international finance.

MGT 498 ..... 3 credits

##### **Strategic Management**

This course gives students the opportunity to integrate management concepts and practices to contemporary business strategies, while discussing the theories of strategic management. This course will focus on improving management decision-making and problem-solving skills. Students will create a strategic management plan.

COMM 215 .....3 credits  
**Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

GEN 200 .....3 credits  
**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 101 .....3 credits  
**Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 .....3 credits  
**Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

MTH 209.....3 credits  
**College Mathematics II**

This course continues the demonstration and examination of various basic algebra concepts that was begun in MTH 208: College Mathematics I. It assists in building skills for performing more complex mathematical operations and problem solving than in earlier courses. These concepts and skills should serve as a foundation for subsequent quantitative business coursework. Applications to real-world problems are emphasized throughout the course. Specific applications to disciplines such as statistics, accounting, finance, and economics are demonstrated and discussed. A variety of other applications, such as geometry, personal finance, science, and engineering, are also demonstrated and discussed.

MTH 220.....3 credits  
**College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

CHM 110 .....3 credits  
**Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

PHY 101.....3 credits  
**Fundamentals of Physics**

This course is designed to introduce physics at an entry level by examining the principle laws of physics leading to a conceptual understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and thermodynamics, electricity and magnetism, and waves. Students will apply these principles using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 145 .....3 credits  
**The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying an historical perspective to analyze contemporary issues.

POL 215 .....3 credits  
**State and Local Political Processes**

This course is designed to introduce students to state and local government structures and processes. Government and business relationships are particularly emphasized. Opportunities are provided for students to observe and interact with state and local government officials and groups and to debate public policy issues in a local or state government meeting setting.

**Course Descriptions for the Manufacturing Sector Emphasis**  
 OI 365.....3 credits

**Knowledge Management and Intellectual Capital**

In this course, students are provided the knowledge and skills necessary for effective knowledge management present in today's increasingly innovative and global business environment. Students will be asked to consider a variety of topics critical to an organization's long-term success including, but not limited to innovation, intellectual capital, goodwill, brand recognition, organizational partnerships, and organizational culture.

MGT 420 .....3 credits  
**Managing Quality in the Supply Chain**

This course provides a detailed look at quality management in the company and the supply chain. It addresses the differing theories of quality to include product and process design as well as customer driven quality. This course includes managing supply chain quality through supplier alliances and development in both the services and manufacturing industries.

HRM 420 ..... 3 credits

#### **Human Resource Risk Management**

This course introduces students to risk management in a human resources department context. The course introduces basic risk management concepts that the student can apply to HR responsibilities of an organization to avoid or mitigate potential liabilities. Topics will include health and safety, security, crisis management, legal compliance, employment and discrimination issues.

ISCOM 352..... 3 credits

#### **Logistics Management**

This course provides an overview of logistics management within a supply chain operation. This includes an analysis of different modes of transportation, logistics management within the United States, and logistics management in the global market. Special emphasis is placed on transportation and fleet management elements including operations management, information technology, decision support systems, fuel savings strategies, and reverse logistics considerations.

ISCOM 472..... 3 credits

#### **Lean Enterprise**

This course provides an overview of lean manufacturing practices within a company and its supply chain. It addresses fundamental practices including flowcharting of business processes, collection and analysis of process performance data and the removal of those activities that are determined to be wasteful or non-essential.

ISCOM 471..... 3 credits

#### **Operations Management**

This course provides an overview of operations management. Students will analyze the planning, organizing, controlling, and general management of productive resources in manufacturing and service organizations. This course also addresses the design and control of systems that are responsible for the efficient use of raw materials, labor, equipment, and facilities in the production of customer satisfying products and services.

ISCOM 473..... 3 credits

#### **Global Sourcing and Procurement**

This course introduces students to the changing world of purchasing and its relationship to supply chains. It addresses purchasing operations and structures, strategic sourcing processes and the critical supply chain elements of managing supply chain inventory, information systems, as well as performance measurement and evaluation.

### **Bachelor of Science in Accounting**

*The following Bachelor of Science in Accounting (BSACC) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Bachelor of Science in Accounting (BSACC) promotes identification with, and orientation to, the accounting profession and is designed to provide knowledge and skills necessary to an accounting career. In addition to the key accounting course work at the introductory and intermediate levels, critical areas of study including auditing and taxation are required in the program. The importance of ethics and international issues are emphasized throughout the curriculum, along with core competencies in technology and communication. The program utilizes specific accounting problem-solving software to provide students with practical knowledge of the accounting field. The program also addresses the goals of professional values, communications and leadership skills, strategic and critical thinking skills, and technology skills of the professional accounting environment and provides additional coverage on the International Financial Reporting Standards (IFRS). Students are also exposed to varied business disciplines including economics, statistics, business law, corporate finance, and marketing to provide the general business overview and context necessary for accounting studies. This program is consistent with generally accepted accounting principles, including the accounting processes and knowledge areas that lead to professional certification.

At the conclusion of the BSACC program:

- Graduates will be able to apply financial accounting principles to record and communicate business activities to stakeholders.
- Graduates will be able to analyze accounting financial statements to support effective fiscal decision making.
- Graduates will be able to evaluate various accounting activities in relation to ethical, legal, and professional standards.
- Graduates will be able to demonstrate an understanding of issues in the areas of government and not-for-profit accounting, international transactions, taxation, and auditing.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsacc>.

*Each state sets forth standards required to be eligible to take the CPA exam and apply for licensure or certification as a CPA. While this program was designed with consideration for the standards proposed by the National Association of State Boards of Accounting (NASBA), the University of Phoenix cannot, and will not, provide any assurance that completion of this program will allow a successful student to qualify within the student's specific jurisdiction. Potential applicants should check with the appropriate organization within their jurisdiction to determine requirements. States frequently change their requirements for examination. There is no assurance that at the time of degree completion the specific jurisdiction's requirements will be consistent with the requirements at the time of admission.*

*This program does not meet the Minnesota State Board of Accountancy requirements to sit for the CPA examination, additional coursework is required.*

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Program Category Requirements - A Track and B Track**

**Communications, 3 total credits**

BCOM 230 ~ .....3 credits  
Business Communication for Accountants  
*(The prerequisite requirement only applies to B Track students)*

**Business Information Systems, 3 total credits**

BIS 220 ~ .....3 credits  
Introduction to Computer Applications and Systems  
*(The prerequisite requirement only applies to B Track students)*

**Management, 6 total credits**

MGT 230 ~ .....3 credits  
Management Theory and Practice  
MGT 311 ~ .....3 credits  
Organizational Development

**Accounting Principles, 6 total credits**

ACC 290 ~ .....3 credits  
Principles of Accounting I  
ACC 291 ~ .....3 credits  
Principles of Accounting II

**Ethics, 3 total credits**

ETH 376 ~ .....3 credits  
Accounting Ethics and Professional Regulations

**Law, 3 total credits**

LAW 421 ~ .....3 credits  
Contemporary Business Law

**Economics, 6 total credits**

ECO 365 ~ .....3 credits  
Principles of Microeconomics  
ECO 372 ~ .....3 credits  
Principles of Macroeconomics

**Marketing, 3 total credits**

MKT 421 ~ .....3 credits  
Marketing

**Finance, 3 total credits**

FIN 370 ~ .....3 credits  
Finance for Business

**Quantitative Studies, 3 total credits**

QNT 351~ .....3 credits  
Quantitative Analysis for Business

**Strategy, 3 total credits**

BUS 475 ~ .....3 credits  
Integrated Business Topics

**Accounting Information Systems, 3 total credits**

ACC 340 ~ .....3 credits  
Accounting Information Systems I

**Cost Accounting, 3 total credits**

ACC 349 ~ .....3 credits  
Cost Accounting

**Intermediate Accounting, 9 total credits**

ACC 421 ~ .....3 credits  
Intermediate Financial Accounting I  
ACC 422 ~ .....3 credits  
Intermediate Financial Accounting II  
ACC 423 ~ .....3 credits  
Intermediate Financial Accounting III

**Tax, 3 total credits**

*Students must choose one of the following courses:*

ACC 455 ~ .....3 credits  
Corporate Taxation  
ACC 456 ~ .....3 credits  
Individual/Estate Taxation

**Government & Non-Profit Accounting, 3 total credits**

ACC 460 ~ .....3 credits  
Government and Non-Profit Accounting

**Auditing, 6 total credits**

ACC 491 ~ .....3 credits  
Contemporary Auditing I  
ACC 492 ~ .....3 credits  
Contemporary Auditing II

**Accounting Research, 3 total credits**

ACC 497 ~ .....3 credits  
Advanced Topics in Accounting Research  
The University reserves the right to modify the required course of study.

**Additional Admission Requirements for the BSACC**

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- South Carolina: Applicants attending a local campus in South Carolina must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit an Associate Degree posted transcript in lieu of the high school documentation. This may include a copy of a transcript or degree verification information from the institution's student website.
- Nevada: Applicants attending a local campus in Nevada must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit a college transcript which documents high school attended and date of completion or a copy of a DD-214 showing high school graduation or equivalency to satisfy this requirement.

- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.
- Applicants must be currently employed or have access to a work environment.

#### **Degree Requirements for the BSACC**

- Completion of a minimum of 120 credits that include the following distribution:
  - A minimum of 57 upper division credits.
  - A minimum of 48 of the 120 credits must be in the general education areas approved by the University.
- A minimum program grade point average (GPA) of 2.0.
- The diploma awarded for this program will read as follows:  
Bachelor of Science in Accounting

#### **General Education Requirements for the BSACC**

A minimum of 48 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement 6 credits

*(A Track must include: COMM 215, equivalent, or higher)*

*(B Track must include: COM 170 and COM 172)*

*Puerto Rico students may not use conversational English to satisfy Communication Arts.*

*Oregon campus students, enrolled in the A Track, must use writing courses to complete the 6 credits of Communication Arts. This does not include Oregon students attending the Online Campus. B Track students will meet this requirement by completing COM 170 and COM 172.*

Mathematics Requirement 6 credits

*(Must include MTH 209, equivalent, or higher)*

Science & Technology Requirement 6 credits

*(B Track must include: SCI 163)*

*Must include at least three (3) credits in the physical or biological sciences*

Humanities Requirement 6 credits

*(B Track must include: HUM 114)*

Social Science Requirement 6 credits

*(B Track must include: PSY 211)*

*Nevada students must complete three (3) credits in Nevada Constitution*

Additional Liberal Arts Requirement 3 credits

*(B Track must include: GEN 195)*

*Puerto Rico students must complete 6 credits of Spanish. Conversational Spanish may not be used. Only Introduction to Spanish, Basic Spanish 1 or higher will satisfy the Spanish requirement.*

Interdisciplinary Requirement 15 credits

*(B track must include: FP 120)*

*Puerto Rico students have a 12 credit Interdisciplinary requirement*

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

#### **General Education Requirements for the BSACC for Arkansas Students**

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement(s) 6 credits

*(A Track must include COMM 215, equivalent, or higher)*

*(B Track must include: COM 170 and COM 172)*

Mathematics Requirement(s) 6 credits

*Must include MTH 220*

Science & Technology Requirement(s) 9 credits

*(B Track must include: SCI 163)*

*Must include CHM 110 and PHY 101 or equivalent transfer coursework with a lab component.*

Humanities Requirement(s) 9 credits

*(B Track must include: HUM 114)*

Social Science Requirement(s) 9 credits

*(B Track must include: PSY 211)*

*Must include: HIS 145 or POL 215 or equivalent transfer coursework with US History or Government content.*

Additional Liberal Arts Requirement(s) 6 credits

*(B Track must include: GEN 195)*

Interdisciplinary Requirement(s) 9 credits

*(B Track must include: FP 120)*

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

For a description of the preceding general education areas, see the Undergraduate Programs section within this catalog.

#### **Academic Progression Requirements for the BSACC**

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application will be enrolled in the B Track and are required to complete the First-Year Sequence.
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or concentration courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.

- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course It is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, must take BCOM 230 Business Communication for Accountants as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence (A Track).
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements.
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- All undergraduate students must satisfy math and English prerequisites prior to enrolling in any course that requires math or English as a prerequisite.

**Residency Requirements and Course Waivers for the BSACC**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 30 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 30 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver with credit for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten (10) years (5 years for IS&T courses) from current program enrollment agreement sign date with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

Through an approved articulation agreement, students who have successfully completed equivalent courses may waive, without credits, up to thirty (30) credits of the Required Course of Study. Students must substitute other upper division coursework to satisfy the upper division credit requirement of their degree program (each program has specific substitution requirements). This policy also applies to upper division courses which are used to fulfill Associate of Arts degree requirements. In order to be granted a waiver, without credit, for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or nationally accredited institution with which the University of Phoenix has an approved articulation agreement.
- The course must have been completed with a grade of "C" (2.0) or better during the effective dates of the approved articulation agreement.
- The course must be approved through the articulation agreement and must be comparable in content and credits to the University course it is replacing.

The following courses in the required course of study may not be waived: ACC 497 and BCOM 230.

**Course Descriptions for the BSACC**

BCOM 230 .....3 credits

**Business Communication for Accountants**

This course introduces students to the foundations of communication in a business accounting setting. Students are exposed to various topics related to interpersonal and group communication within the context of applications to the accounting field. Students will develop skills in the forms of written communication, including memos, emails, business letters, and reports. Other topics include communication ethics, collaboration, information utilization, critical thinking, and professional competence and values.

BIS 220 .....3 credits

**Introduction to Computer Applications and Systems**

This course provides an overview of Business Information Systems. Students learn to apply Microsoft Office™ tools including work processing, spreadsheet, database, and presentation software to accomplish business objectives. Other topics include uses of application software and the Internet for effective problem solving, exploration of relevant emerging technologies, and how information is used across different industries.

MGT 230 .....3 credits

**Management Theory and Practice**

This course explores the rich field of management in theory and practice, and as both a science and an art. Students learn to apply management concepts to current workplace issues. Other topics include increasing competitive forces, expectations for successful performance of employees and organizations, and achieving desired business goals.

MGT 311 .....3 credits

**Organizational Development**

This organizational behavior course encompasses the study of individual and group behavior in organizational settings. Students will learn to examine their role in an organization. Other topics include strategic elements of organizational behavior, workforce diversity, managing change, effective communication, and performance systems.

ACC 290 ..... 3 credits

**Principles of Accounting I**

This course covers the fundamentals of financial accounting as well as the identification, measurement, and reporting of the financial effects of economic events on an enterprise. Students will learn to examine financial information from the perspective of management. Other topics include decision-making, planning, and controlling from the perspective of a practicing manager.

ACC 291 ..... 3 credits

**Principles of Accounting II**

This course introduces accounting concepts in a business environment. Students learn to create and apply accounting documents in making better business decisions. Other topics include plant assets, liabilities, accounting for corporations, investments, statements of cash flows, financial statement analysis, time value of money, payroll accounting, and other significant liabilities.

ETH 376 ..... 3 credits

**Accounting Ethics and Professional Relations**

This course providing a foundation in the nature of ethics, moral, legal, and social issues in the accounting and business environments. Students learn topics including ethical reasoning, dealing with controversial issues, and the roles and responsibilities of accounting and auditing professionals. Other topics include a discussion of the AICPA Code of Professional Conduct and the Sarbanes-Oxley Act.

LAW 421 ..... 3 credits

**Contemporary Business Law**

This course reviews the US legal system, common law and its development, organizational structures, and the regulatory environment pertinent to business. Students will learn to critically examine torts, crimes, and business ethics; contracts; business associations (agency, partnerships, corporations); wills, estates, trusts, and other legal entities; securities regulations; and investor protection.

ECO 365 ..... 3 credits

**Principles of Microeconomics**

This course provides students with the basic theories, concepts, terminology, and uses of microeconomics. Students learn practical applications for microeconomics in their personal and professional lives through assimilation of fundamental concepts and analysis of actual economic events.

ECO 372 ..... 3 credits

**Principles of Macroeconomics**

This course provides students with the basic theories, concepts, terminology, and uses of macroeconomics. Students learn practical applications for macroeconomics in their personal and professional lives through assimilation of fundamental concepts and analysis of actual economic events.

MKT 421 ..... 3 credits

**Marketing**

This course involves an integrated analysis of the role of marketing within the total organization. Specific attention is given to the analysis of factors affecting consumer behavior, the identification of marketing variables, the development and use of marketing strategies, and the discussion of international marketing issues.

FIN 370 ..... 3 credits

**Finance for Business**

This course introduces the student to the essential elements of finance for business. Emphasis is placed on financial management, financial markets, and the tools, techniques, and methodologies used in making financial decisions. Topics include: Financial planning, working capital management, capital budgeting, long term financing, and international finance.

QNT 351 ..... 3 credits

**Quantitative Analysis for Business**

This course integrates applied business research and descriptive statistics. Students will learn to apply business research and descriptive statistics in making better business decisions. Other topics include examination of the role of statistics in research, statistical terminology, the appropriate use of statistical techniques, and interpretation of statistical findings in business and research.

BUS 475 ..... 3 credits

**Integrated Business Topics**

The integrated business topics course examines strategic business management while integrating topics from previously completed business foundation coursework. This allows students to demonstrate a comprehensive understanding of the undergraduate business curricula with a significant emphasis placed on the assessment of individual outcomes to determine content mastery.

ACC 340 ..... 3 credits

**Accounting Information Systems I**

This course is designed to provide accounting students with the proper mix of technical information and real-world applications. Areas of study include fundamental concepts and technologies, (what computers can do for business), the Internet, intranets electronic commerce, information systems development, basic project management principles, decision support systems, and the benefits of computer/human synergy.

ACC 349 ..... 3 credits

**Cost Accounting**

This course introduces cost terminology and flows, standard cost systems, relevant costing, budgeting, inventory control, capital asset selection, responsibility accounting, and performance measurement.

ACC 421 ..... 3 credits

**Intermediate Financial Accounting I**

This course examines the conceptual framework of accounting, including cash versus accrual accounting, the income statement and balance sheet, the time value of money, revenue recognition, statement of cash flows and full disclosure issues.

ACC 422 ..... 3 credits

**Intermediate Financial Accounting II**

This course is the second of the three part series of courses related to intermediate accounting. This section examines the balance sheet in more detail, including intangible assets, current liabilities and contingencies, long-term liabilities, stockholder's equity, and earnings per share. The course finishes with a look at investments and revenue recognition. Interwoven in the presentation of the material is an assortment of ethical dilemmas that encourage discussions about how the accountant should handle specific situations.

ACC 423 ..... 3 credits

**Intermediate Financial Accounting III**

This course is the third of a three-part series of courses related to intermediate accounting. This course examines owner’s equity, investments, income taxes, pensions and post-retirement benefits, as well as changes and error analysis. The course finishes with a look at derivative instruments. Interwoven in the presentation of the material is an assortment of ethical dilemmas that encourage discussions about how the accountant should handle specific situations.

ACC 455 ..... 3 credits

**Corporate Taxation**

This course is a basic introduction to federal corporate taxation. The purpose is to familiarize the student with fundamental tax issues and provide the student with a general understanding of the history, laws, and policies of federal taxation.

ACC 456 ..... 3 credits

**Individual/Estate Taxation**

This course is a basic introduction to federal individual and estate taxation. The purpose is to familiarize the student with fundamental tax issues and provide the student with a general understanding of the history, laws, and policies of federal taxation.

ACC 460 ..... 3 credits

**Government and Non-Profit Accounting**

This course covers fund accounting, budget and control issues, revenue and expense recognition and issues of reporting for both government and non-profit entities.

ACC 491 ..... 3 credits

**Contemporary Auditing I**

This course is the first in a two-part series that deals with auditing a company’s financial reports, internal controls, and Electronic Data Processing (EDP) systems. Topics include auditing standards, evidence, audit planning and documentation, materiality and risk, internal control, statistical tools, and the overall audit plan and program.

ACC 492 ..... 3 credits

**Contemporary Auditing II**

This course is the second in a two-part series that deals with auditing a company’s financial reports, internal controls, and Electronic Data Processing (EDP) systems. Topics include the personnel and payroll system, inventory, capital acquisition cycle, selected balance sheet and income statement accounts, audit reports, assurances and other services, professional ethics, and legal responsibilities.

ACC 497 ..... 3 credits

**Advanced Topics in Accounting Research**

This course in accounting research provides students with an in-depth examination of the Generally Accepted Accounting Principles (GAAP) and acceptable alternative reporting practices. Through comprehensive case studies, students will develop the research application skills necessary to analyze and make decisions regarding accounting reporting dilemmas in for-profit and not-for-profit companies.

COMM 215 ..... 3 credits

**Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

GEN 200 ..... 3 credits

**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 101 ..... 3 credits

**Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 ..... 3 credits

**Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

MTH 209 ..... 3 credits

**College Mathematics II**

This course continues the demonstration and examination of various basic algebra concepts that was begun in MTH 208: College Mathematics I. It assists in building skills for performing more complex mathematical operations and problem solving than in earlier courses. These concepts and skills should serve as a foundation for subsequent quantitative business coursework. Applications to real-world problems are emphasized throughout the course. Specific applications to disciplines such as statistics, accounting, finance, and economics are demonstrated and discussed. A variety of other applications, such as geometry, personal finance, science, and engineering, are also demonstrated and discussed.

MTH 220 ..... 3 credits

**College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

CHM 110 ..... 3 credits  
**Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

PHY 101 ..... 3 credits  
**Fundamentals of Physics**

This course is designed to introduce physics at an entry level by examining the principle laws of physics leading to a conceptual understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and thermodynamics, electricity and magnetism, and waves. Students will apply these principles using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 145 ..... 3 credits  
**The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying an historical perspective to analyze contemporary issues.

POL 215 ..... 3 credits  
**State and Local Political Processes**

This course is designed to introduce students to state and local government structures and processes. Government and business relationships are particularly emphasized. Opportunities are provided for students to observe and interact with state and local government officials and groups and to debate public policy issues in a local or state government meeting setting.

**Bachelor of Science/Concentration in Accounting (Ohio)**

*The following Bachelor of Science/Concentration in Accounting (BSACC) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Bachelor of Science in Accounting (BSACC) promotes identification with, and orientation to, the accounting profession and is designed to provide knowledge and skills necessary to an accounting career. In addition to the key accounting course work at the introductory and intermediate levels, critical areas of study including auditing and taxation are required in the program. The importance of ethics and international issues are emphasized throughout the curriculum, along with core competencies in technology and communication. The program utilizes specific accounting problem-solving software to provide students with practical knowledge of the accounting field. The program also addresses the goals of professional values, communications and leadership skills, strategic and critical thinking skills, and technology skills of the professional accounting environment and provides additional coverage on the International Financial Reporting Standards (IFRS). Students are also exposed to varied business disciplines including economics, statistics, business law, corporate finance, and marketing to provide the general business overview and context necessary for accounting studies. This program is consistent with generally accepted accounting principles, including the accounting processes and knowledge areas that lead to professional certification.

At the conclusion of the BSACC program:

- Graduates will be able to apply financial accounting principles to record and communicate business activities to stakeholders.
- Graduates will be able to analyze accounting financial statements to support effective fiscal decision making.
- Graduates will be able to evaluate various accounting activities in relation to ethical, legal, and professional standards.
- Graduates will be able to demonstrate an understanding of issues in the areas of government and not-for-profit accounting, international transactions, taxation, and auditing.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsacc>.

*Each state sets forth standards required to be eligible to take the CPA exam and apply for licensure or certification as a CPA. While this program was designed with consideration for the standards proposed by the National Association of State Boards of Accounting (NASBA), the University of Phoenix cannot, and will not, provide any assurance that completion of this program will allow a successful student to qualify within the student's specific jurisdiction. Potential applicants should check with the appropriate organization within their jurisdiction to determine requirements. States frequently change their requirements for examination. There is no assurance that at the time of degree completion the specific jurisdiction's requirements will be consistent with the requirements at the time of admission.*

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Program Category Requirements - A Track and B Track**

**Communications, 3 total credits**

BCOM 230 ~ .....3 credits  
Business Communication for Accountants  
(The prerequisite requirement only applies to B Track students)

**Business Information Systems, 3 total credits**

BIS 220 ~ .....3 credits  
Introduction to Computer Applications and Systems

**Management, 6 total credits**

MGT 230 ~ .....3 credits  
Management Theory and Practice  
MGT 311 ~ .....3 credits  
Organizational Development

**Accounting Principles, 6 total credits**

ACC 290 ~ .....3 credits  
Principles of Accounting I  
ACC 291 ~ .....3 credits  
Principles of Accounting II

**Ethics, 3 total credits**

ETH 376 ~ .....3 credits  
Accounting Ethics and Professional Regulations

**Law, 3 total credits**

LAW 421 ~ .....3 credits  
Contemporary Business Law

**Economics, 6 total credits**

ECO 365 ~ .....3 credits  
Principles of Microeconomics  
ECO 372 ~ .....3 credits  
Principles of Macroeconomics

**Marketing, 3 total credits**

MKT 421 ~ .....3 credits  
Marketing

**Finance, 3 total credits**

FIN 370 ~ .....3 credits  
Finance for Business

**Quantitative Studies, 3 total credits**

QNT 351~ .....3 credits  
Quantitative Analysis for Business

**Strategy, 3 total credits**

BUS 475 ~ .....3 credits  
Integrated Business Topics

**Accounting Information Systems, 3 total credits**

ACC 340 ~ .....3 credits  
Accounting Information Systems I

**Cost Accounting, 3 total credits**

ACC 349 ~ .....3 credits  
Cost Accounting

**Intermediate Accounting, 9 total credits**

ACC 421 ~ .....3 credits  
Intermediate Financial Accounting I  
ACC 422 ~ .....3 credits  
Intermediate Financial Accounting II  
ACC 423 ~ .....3 credits  
Intermediate Financial Accounting III

**Tax, 3 total credits**

Students must choose one of the following courses:

ACC 455 ~ .....3 credits  
Corporate Taxation  
ACC 456 ~ .....3 credits  
Individual/Estate Taxation

**Government & Non-Profit Accounting, 3 total credits**

ACC 460 ~ .....3 credits  
Government and Non-Profit Accounting

**Auditing, 6 total credits**

ACC 491 ~ .....3 credits  
Contemporary Auditing I  
ACC 492 ~ .....3 credits  
Contemporary Auditing II

**Accounting Research, 3 total credits**

ACC 497 ~ .....3 credits  
Advanced Topics in Accounting Research

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for the BSACC**

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- Applicants must be currently employed or have access to a work environment.

**Degree Requirements for the BSACC**

- Completion of a minimum of 120 credits that include the following distribution:
  - A minimum of 57 upper division credits.
  - A minimum of 48 of the 120 credits must be in the general education areas approved by the University.
- A minimum program grade point average (GPA) of 2.0.
- The diploma awarded for this program will read as follows: Bachelor of Science in Accounting

**General Education Requirements for the BSACC**

A minimum of 48 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement 6 credits  
(A Track must include: COMM 215, equivalent, or higher)  
(B Track must include: COM 170 and COM 172)

Mathematics Requirement 6 credits  
(Must include MTH 209, equivalent, or higher)

Science & Technology Requirement 6 credits

(B Track must include: SCI 163)

Must include at least three (3) credits in the physical or biological sciences

Humanities Requirement 6 credits

(B Track must include: HUM 114)

Social Science Requirement 6 credits

(B Track must include: PSY 211)

Additional Liberal Arts Requirement 3 credits

(B Track must include: GEN 195)

Interdisciplinary Requirement 15 credits

(B track must include: FP 120)

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

For a description of the preceding general education areas, see the Undergraduate Programs section within this catalog.

#### Academic Progression Requirements for the BSACC

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application will be enrolled in the B Track and are required to complete the First-Year Sequence.
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or concentration courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
  - The course used to satisfy a First-Year Sequence course must be comparable in content to the university course it is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, must take GEN 200 Foundations for General Education and Professional Success as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence (A Track).

- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements.
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- All undergraduate students must satisfy math and English prerequisites prior to enrolling in any course that requires math or English as a prerequisite.

#### Residency Requirements and Course Waivers for the BSACC

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 30 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 30 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver with credit for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten (10) years (5 years for IS&T courses) from current program enrollment agreement sign date with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

Through an approved articulation agreement, students who have successfully completed equivalent courses may waive, without credits, up to thirty (30) credits of the Required Course of Study. Students must substitute other upper division coursework to satisfy the upper division credit requirement of their degree program (each program has specific substitution requirements). This policy also applies to upper division courses which are used to fulfill Associate of Arts degree requirements. In order to be granted a waiver, without credit, for a course in the Required Course of Study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or nationally accredited institution with which the University of Phoenix has an approved articulation agreement.
- The course must have been completed with a grade of "C" (2.0) or better during the effective dates of the approved articulation agreement.
- The course must be approved through the articulation agreement and must be comparable in content and credits to the University course it is replacing.

The following courses in the required course of study may not be waived: ACC 497 and BCOM 230.

**Course Descriptions for the BSACC**

BCOM 230 .....3 credits

**Business Communication for Accountants**

This course introduces students to the foundations of communication in a business accounting setting. Students are exposed to various topics related to interpersonal and group communication within the context of applications to the accounting field. Students will develop skills in the forms of written communication, including memos, emails, business letters, and reports. Other topics include communication ethics, collaboration, information utilization, critical thinking, and professional competence and values.

BIS 220 .....3 credits

**Introduction to Computer Applications and Systems**

This course provides an overview of Business Information Systems. Students learn to apply Microsoft Office™ tools including work processing, spreadsheet, database, and presentation software to accomplish business objectives. Other topics include uses of application software and the Internet for effective problem solving, exploration of relevant emerging technologies, and how information is used across different industries.

MGT 230 .....3 credits

**Management Theory and Practice**

This course explores the rich field of management in theory and practice, and as both a science and an art. Students learn to apply management concepts to current workplace issues. Other topics include increasing competitive forces, expectations for successful performance of employees and organizations, and achieving desired business goals.

MGT 311 .....3 credits

**Organizational Development**

This organizational behavior course encompasses the study of individual and group behavior in organizational settings. Students will learn to examine their role in an organization. Other topics include strategic elements of organizational behavior, workforce diversity, managing change, effective communication, and performance systems.

ACC 290 .....3 credits

**Principles of Accounting I**

This course covers the fundamentals of financial accounting as well as the identification, measurement, and reporting of the financial effects of economic events on an enterprise. Students will learn to examine financial information from the perspective of management. Other topics include decision-making, planning, and controlling from the perspective of a practicing manager.

ACC 291 .....3 credits

**Principles of Accounting II**

This course introduces accounting concepts in a business environment. Students learn to create and apply accounting documents in making better business decisions. Other topics include plant assets, liabilities, accounting for corporations, investments, statements of cash flows, financial statement analysis, time value of money, payroll accounting, and other significant liabilities.

ETH 376 .....3 credits

**Accounting Ethics and Professional Relations**

This course providing a foundation in the nature of ethics, moral, legal, and social issues in the accounting and business environments. Students learn topics including ethical reasoning, dealing with controversial issues, and the roles and responsibilities of accounting and auditing professionals. Other topics include a discussion of the AICPA Code of Professional Conduct and the Sarbanes-Oxley Act.

LAW 421 .....3 credits

**Contemporary Business Law**

This course reviews the US legal system, common law and its development, organizational structures, and the regulatory environment pertinent to business. Students will learn to critically examine torts, crimes, and business ethics; contracts; business associations (agency, partnerships, corporations); wills, estates, trusts, and other legal entities; securities regulations; and investor protection.

ECO 365 .....3 credits

**Principles of Microeconomics**

This course provides students with the basic theories, concepts, terminology, and uses of microeconomics. Students learn practical applications for microeconomics in their personal and professional lives through assimilation of fundamental concepts and analysis of actual economic events.

ECO 372 .....3 credits

**Principles of Macroeconomics**

This course provides students with the basic theories, concepts, terminology, and uses of macroeconomics. Students learn practical applications for macroeconomics in their personal and professional lives through assimilation of fundamental concepts and analysis of actual economic events.

MKT 421 .....3 credits

**Marketing**

This course involves an integrated analysis of the role of marketing within the total organization. Specific attention is given to the analysis of factors affecting consumer behavior, the identification of marketing variables, the development and use of marketing strategies, and the discussion of international marketing issues.

FIN 370 .....3 credits

**Finance for Business**

This course introduces the student to the essential elements of finance for business. Emphasis is placed on financial management, financial markets, and the tools, techniques, and methodologies used in making financial decisions. Topics include: Financial planning, working capital management, capital budgeting, long term financing, and international finance.

QNT 351..... 3 credits

### **Quantitative Analysis for Business**

This course integrates applied business research and descriptive statistics. Students will learn to apply business research and descriptive statistics in making better business decisions. Other topics include examination of the role of statistics in research, statistical terminology, the appropriate use of statistical techniques, and interpretation of statistical findings in business and research.

BUS 475..... 3 credits

### **Integrated Business Topics**

The integrated business topics course examines strategic business management while integrating topics from previously completed business foundation coursework. This allows students to demonstrate a comprehensive understanding of the undergraduate business curricula with a significant emphasis placed on the assessment of individual outcomes to determine content mastery.

ACC 340..... 3 credits

### **Accounting Information Systems I**

This course is designed to provide accounting students with the proper mix of technical information and real-world applications. Areas of study include fundamental concepts and technologies, (what computers can do for business), the Internet, intranets electronic commerce, information systems development, basic project management principles, decision support systems, and the benefits of computer/human synergy.

ACC 349..... 3 credits

### **Cost Accounting**

This course introduces cost terminology and flows, standard cost systems, relevant costing, budgeting, inventory control, capital asset selection, responsibility accounting, and performance measurement.

ACC 421..... 3 credits

### **Intermediate Financial Accounting I**

This course examines the conceptual framework of accounting, including cash versus accrual accounting, the income statement and balance sheet, the time value of money, revenue recognition, statement of cash flows and full disclosure issues.

ACC 422..... 3 credits

### **Intermediate Financial Accounting II**

This course is the second of the three part series of courses related to intermediate accounting. This section examines the balance sheet in more detail, including intangible assets, current liabilities and contingencies, long-term liabilities, stockholder's equity, and earnings per share. The course finishes with a look at investments and revenue recognition. Interwoven in the presentation of the material is an assortment of ethical dilemmas that encourage discussions about how the accountant should handle specific situations.

ACC 423..... 3 credits

### **Intermediate Financial Accounting III**

This course is the third of a three-part series of courses related to intermediate accounting. This course examines owner's equity, investments, income taxes, pensions and post-retirement benefits, as well as changes and error analysis. The course finishes with a look at derivative instruments. Interwoven in the presentation of the material is an assortment of ethical dilemmas that encourage discussions about how the accountant should handle specific situations.

ACC 455..... 3 credits

### **Corporate Taxation**

This course is a basic introduction to federal corporate taxation. The purpose is to familiarize the student with fundamental tax issues and provide the student with a general understanding of the history, laws, and policies of federal taxation.

ACC 456..... 3 credits

### **Individual/Estate Taxation**

This course is a basic introduction to federal individual and estate taxation. The purpose is to familiarize the student with fundamental tax issues and provide the student with a general understanding of the history, laws, and policies of federal taxation.

ACC 460..... 3 credits

### **Government and Non-Profit Accounting**

This course covers fund accounting, budget and control issues, revenue and expense recognition and issues of reporting for both government and non-profit entities.

ACC 491..... 3 credits

### **Contemporary Auditing I**

This course is the first in a two-part series that deals with auditing a company's financial reports, internal controls, and Electronic Data Processing (EDP) systems. Topics include auditing standards, evidence, audit planning and documentation, materiality and risk, internal control, statistical tools, and the overall audit plan and program.

ACC 492..... 3 credits

### **Contemporary Auditing II**

This course is the second in a two-part series that deals with auditing a company's financial reports, internal controls, and Electronic Data Processing (EDP) systems. Topics include the personnel and payroll system, inventory, capital acquisition cycle, selected balance sheet and income statement accounts, audit reports, assurances and other services, professional ethics, and legal responsibilities.

ACC 497..... 3 credits

### **Advanced Topics in Accounting Research**

This course in accounting research provides students with an in-depth examination of the Generally Accepted Accounting Principles (GAAP) and acceptable alternative reporting practices. Through comprehensive case studies, students will develop the research application skills necessary to analyze and make decisions regarding accounting reporting dilemmas in for-profit and not-for-profit companies.

COMM 215..... 3 credits

### **Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

MTH 209.....3 credits  
**College Mathematics II**

This course continues the demonstration and examination of various basic algebra concepts that was begun in MTH 208: College Mathematics I. It assists in building skills for performing more complex mathematical operations and problem solving than in earlier courses. These concepts and skills should serve as a foundation for subsequent quantitative business coursework. Applications to real-world problems are emphasized throughout the course. Specific applications to disciplines such as statistics, accounting, finance, and economics are demonstrated and discussed. A variety of other applications, such as geometry, personal finance, science, and engineering, are also demonstrated and discussed.

GEN 200 .....3 credits  
**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 101 .....3 credits  
**Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 .....3 credits  
**Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

**Associate Programs Pathways Program**

Non-degree seeking students are permitted to take courses if admitted into the Pathways Program. The Pathways Program is designed for current high school juniors and seniors seeking to earn college credits while still enrolled in secondary schools. Pathways students may earn a maximum of 12 credits at the University of Phoenix. Non-degree students are not eligible to receive most types of financial aid or veterans benefits and must demonstrate English proficiency, if applicable, to be eligible for course enrollment. The Pathways Program admissions process must be completed before enrollment in any courses.

Admission into the Pathways program requires:

- Pathways Non-degree Application
- High School Junior or Senior Standing
- Pathways students must meet all prerequisite requirements for the program in which the courses are included. Students must also meet all admission requirements, with the exception of the HS diploma or equivalent
- Parent or guardian consent
- \$25 application fee

Before proceeding beyond 12 credits, Pathways program students must submit a University of Phoenix degree seeking application for admission, possess a high school diploma (or equivalent), and be granted acceptance to the University of Phoenix. Pathways students who want to earn more than 12 credits will be deemed degree seeking and be required to submit an application for admission to a University of Phoenix degree program.

*Note: The Pathways Program is not available in all states. Please consult an enrollment counselor to determine if residents of a specific state are eligible for this program.*

---

**COLLEGE OF INFORMATION SYSTEMS AND TECHNOLOGY**


---

**Associate of Arts/Concentration in Information Technology**

The following Associate of Arts/Concentration in Information Technology (AAIT) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

The Associate of Arts with a concentration in Information Technology focuses on basic understanding of programming practices, web design and the creation of web pages, local and wide area networking and information systems security. Courses build upon the fundamentals of information technology to give students the skills needed to address and solve real-world IT problems.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology**

IT 210 ~ .....	3 credits
Fundamentals of Programming with Algorithms and Logic	
IT 236 ~ .....	3 credits
Intro to Web Design I	
IT 237 ~ .....	3 credits
Intro to Web Design II	
IT 240 ~ .....	3 credits
Introduction to LAN Technologies	
IT 242 ~ .....	3 credits
Introduction to WAN Technologies	
IT 244 ~ .....	3 credits
Introduction to IT Security	

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

**General Education Requirements for the AAIT**

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for AAIT**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

#### **Academic Progression Requirements for the AAIT**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class has been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

#### **Residency Requirements for the AAIT**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

#### **Course Descriptions for the AAIT**

IT 210 ..... 3 credits

##### **Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 236 ..... 3 credits

##### **Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 ..... 3 credits

##### **Intro to Web Design II**

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 240 ..... 3 credits

##### **LAN Technologies**

This foundational course covers local area network (LAN) topics including rationale for networking, Open Systems Interconnection (OSI) models, common network topologies and architecture, client/server concepts, basic hardware devices and usage, and basic networking security concepts.

IT 242 ..... 3 credits

##### **Introduction to WAN Technologies**

This course covers Wide Area Networking/Enterprise networking concepts and its interface with metropolitan area networks (MAN) and local area networks (LAN). The course will cover telecommunication technologies, backbone technologies, hardware device protocol, hardware selection and usage, and basic WAN security considerations and planning.

IT 244 ..... 3 credits  
**Intro to IT Security**

General concepts of information systems security will be introduced. Content includes governmental views, positions and processes of national security. Other concepts include contingency planning and business resumption planning, backup schemes and implementation strategies, as well as an introduction to various types of invasive actions and prevention measures.

COM 150 ..... 3 credits  
**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits  
**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits  
**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Emphasis in Information Technology (Maryland-Online)**

*The following Associate of Arts/Emphasis in Information Technology (AAIT) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts with an emphasis in Information Technology focuses on basic understanding of programming practices, web design and the creation of web pages, local and wide area networking and information systems security. Courses build upon the fundamentals of information technology to give students the skills needed to address and solve real-world IT problems.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Emphasis in Information Technology**

- IT 210 ~ ..... 3 credits  
Fundamentals of Programming with Algorithms and Logic
  - IT 236 ~ ..... 3 credits  
Intro to Web Design I
  - IT 237 ~ ..... 3 credits  
Intro to Web Design II
  - IT 240 ~ ..... 3 credits  
Introduction to LAN Technologies
  - IT 242 ~ ..... 3 credits  
Introduction to WAN Technologies
  - IT 244 ~ ..... 3 credits  
Introduction to IT Security
- The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT**

- Communication Arts Requirement 6 credits  
(A Track must include: COM 150 and COM 220)  
(B Track must include: COM 155 and COM 156)
- Mathematics Requirement 6 credits
- Science & Technology Requirement 6 credits  
(A Track must include: 3 credits in the physical or biological sciences)  
(B Track must include: SCI 162)
- Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### Degree Requirements for AAIT

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the emphasis. Emphases are reflected on the transcript only.

### Academic Progression Requirements for the AAIT

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or emphasis courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.

- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class has been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the emphasis and cannot count toward General Education totals.

### Residency Requirements for the AAIT

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

### Course Descriptions for the AAIT

IT 210 ..... 3 credits

#### Fundamentals of Programming with Algorithms and Logic

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 236 ..... 3 credits

**Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 ..... 3 credits

**Intro to Web Design II**

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 240 ..... 3 credits

**LAN Technologies**

This foundational course covers local area network (LAN) topics including rationale for networking, Open Systems Interconnection (OSI) models, common network topologies and architecture, client/server concepts, basic hardware devices and usage, and basic networking security concepts.

IT 242 ..... 3 credits

**Introduction to WAN Technologies**

This course covers Wide Area Networking/Enterprise networking concepts and its interface with metropolitan area networks (MAN) and local area networks (LAN). The course will cover telecommunication technologies, backbone technologies, hardware device protocol, hardware selection and usage, and basic WAN security considerations and planning.

IT 244 ..... 3 credits

**Intro to IT Security**

General concepts of information systems security will be introduced. Content includes governmental views, positions and processes of national security. Other concepts include contingency planning and business resumption planning, backup schemes and implementation strategies, as well as an introduction to various types of invasive actions and prevention measures.

COM 150 ..... 3 credits

**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits

**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits

**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits

**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits

**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

## Associate of Arts/Concentration in Information Technology/Networking

The following Associate of Arts/Concentration in Information Technology/Networking (AAIT/N) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

The Associate of Arts in Information Technology/Networking concentration focuses on information systems and the analysis, design, and security of modern computer networks. Courses emphasize Local Area Networks, Wireless Local Area Networks, Wide Area Networks, and network security. Students will be able to simulate network administration tasks through remote access to real hardware and software commonly used in the IT industry. Additionally, courses include scenario-based activities, placing students in real-world situations that allow them to apply foundational knowledge and skills.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-n>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

### Concentration in Information Technology/Networking - Track A and B

IT 205 .....	3 credits
Management Information Systems	
IT 210 .....	3 credits
Fundamentals of Programming with Algorithms and Logic	
IT 240 ~ .....	3 credits
Intro to LAN Technologies	
IT 241 ~ .....	3 credits
Intro to W-LAN Technologies	
IT 242 ~ .....	3 credits
Intro to WAN Technologies	
IT 244 ~ .....	3 credits
Intro to IT Security	

The University reserves the right to modify the required course of study.

### Additional Admission Requirements for AAIT/N

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

### General Education Requirements for the AAIT/N

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### Degree Requirements for AAIT/N

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/N**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class has been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

**Residency Requirements for the AAIT/N**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/N**

- IT 205 ..... 3 credits
- Management of Information Systems**  
This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.
- IT 210 ..... 3 credits
- Fundamentals of Programming with Algorithms and Logic**  
This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.
- IT 240 ..... 3 credits
- LAN Technologies**  
This foundational course covers local area network (LAN) topics including rationale for networking, Open Systems Interconnection (OSI) models, common network topologies and architecture, client/server concepts, basic hardware devices and usage, and basic networking security concepts.
- IT 241 ..... 3 credits
- Introduction to W-LAN Technologies**  
Concepts of wireless networking systems include wireless networking topologies, hardware protocols, hardware selection and implementation, interfaces with MAN, LAN and WAN networks, basic wireless security and integration concepts.
- IT 242 ..... 3 credits
- Introduction to WAN Technologies**  
This course covers Wide Area Networking/Enterprise networking concepts and its interface with metropolitan area networks (MAN) and local area networks (LAN). The course will cover telecommunication technologies, backbone technologies, hardware device protocol, hardware selection and usage, and basic WAN security considerations and planning.

IT 244 ..... 3 credits  
**Intro to IT Security**

General concepts of information systems security will be introduced. Content includes governmental views, positions and processes of national security. Other concepts include contingency planning and business resumption planning, backup schemes and implementation strategies, as well as an introduction to various types of invasive actions and prevention measures.

COM 150 ..... 3 credits  
**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits  
**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits  
**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Emphasis in Information Technology/Networking (Maryland-Online)**

*The following Associate of Arts/Emphasis in Information Technology/Networking (AAIT/N) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts in Information Technology/Networking emphasis focuses on information systems and the analysis, design, and security of modern computer networks. Courses emphasize Local Area Networks, Wireless Local Area Networks, Wide Area Networks, and network security. Students will be able to simulate network administration tasks through remote access to real hardware and software commonly used in the IT industry. Additionally, courses include scenario-based activities, placing students in real-world situations that allow them to apply foundational knowledge and skills.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-n>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Emphasis in Information Technology/Networking - Track A and B**

IT 205 ..... 3 credits  
**Management Information Systems**

IT 210 ..... 3 credits  
**Fundamentals of Programming with Algorithms and Logic**

IT 240 ~ ..... 3 credits  
**Intro to LAN Technologies**

IT 241 ~ ..... 3 credits  
**Intro to W-LAN Technologies**

IT 242 ~ ..... 3 credits  
**Intro to WAN Technologies**

IT 244 ~ ..... 3 credits  
**Intro to IT Security**

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/N**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/N**

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for AAIT/N**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the emphasis. Emphases are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/N**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or emphasis courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class has been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the emphasis and cannot count toward General Education totals.

**Residency Requirements for the AAIT/N**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/N**

IT 205 .....3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 .....3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 240 .....3 credits

**LAN Technologies**

This foundational course covers local area network (LAN) topics including rationale for networking, Open Systems Interconnection (OSI) models, common network topologies and architecture, client/server concepts, basic hardware devices and usage, and basic networking security concepts.

IT 241 .....3 credits

**Introduction to W-LAN Technologies**

Concepts of wireless networking systems include wireless networking topologies, hardware protocols, hardware selection and implementation, interfaces with MAN, LAN and WAN networks, basic wireless security and integration concepts.

IT 242 .....3 credits

**Introduction to WAN Technologies**

This course covers Wide Area Networking/Enterprise networking concepts and its interface with metropolitan area networks (MAN) and local area networks (LAN). The course will cover telecommunication technologies, backbone technologies, hardware device protocol, hardware selection and usage, and basic WAN security considerations and planning.

IT 244 .....3 credits

**Intro to IT Security**

General concepts of information systems security will be introduced. Content includes governmental views, positions and processes of national security. Other concepts include contingency planning and business resumption planning, backup schemes and implementation strategies, as well as an introduction to various types of invasive actions and prevention measures.

COM 150 .....3 credits

**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 .....3 credits

**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 .....3 credits

**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits

**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 .....3 credits

**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

## Associate of Arts/Concentration in Information Technology/Programming

The following Associate of Arts/Concentration in Information Technology/Programming (AAIT/PRG) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

A concentration in Programming offers coursework in computer scripting and programming.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-prg>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

### Concentration in Information Technology/Programming - Track A and B

IT 205 ~ .....	3 credits
Management of Information Systems	
IT 210 ~ .....	3 credits
Fundamentals of Programming with Algorithms & Logic	
IT 236 ~ .....	3 credits
Intro to Web Design I	
IT 237 ~ .....	3 credits
Intro to Web Design II	
IT 215 ~ .....	3 credits
Java Programming	
IT 218 ~ .....	3 credits
Introduction to C/C++	

The University reserves the right to modify the required course of study

### Additional Admission Requirements for AAIT/PRG

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

### General Education Requirements for the AAIT/PRG

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### Degree Requirements for AAIT/PRG

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

### Academic Progression Requirements for the AAIT/PRG

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

**Residency Requirements for the AAIT/PRG**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/PRG**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 236 ..... 3 credits

**Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 ..... 3 credits

**Intro to Web Design II**

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 215 ..... 3 credits

**JAVA Programming**

JAVA has rapidly become the language of choice for platform independent implementations. This course provides a general introduction to programming, data structures and object-oriented programming in particular. The syntax and semantics of the JAVA language are addressed, as well as related topics which include object-oriented programming concepts, terminology, and notation. This class requires the Java2 Software Development Kit, Student Edition V, 1.4.2\_02 2003.

IT 218 ..... 3 credits

**Introduction to C/C++**

This course introduces the student to C/C++ programming. The syntax and semantics of the C/C++ programming language are used to produce simple computer programs.

COM 150 ..... 3 credits  
**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits  
**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits  
**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Emphasis in Information Technology/Programming (Maryland-Online)**

*The following Associate of Arts/Emphasis in Information Technology/Programming (AAIT/PRG) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

A concentration in Programming offers coursework in computer scripting and programming. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-prg>. Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Programming - Track A and B**

- IT 205 ~ ..... 3 credits  
Management of Information Systems
- IT 210 ~ ..... 3 credits  
Fundamentals of Programming with Algorithms & Logic
- IT 236 ~ ..... 3 credits  
Intro to Web Design I
- IT 237 ~ ..... 3 credits  
Intro to Web Design II
- IT 215 ~ ..... 3 credits  
Java Programming
- IT 218 ~ ..... 3 credits  
Introduction to C/C++

The University reserves the right to modify the required course of study

**Additional Admission Requirements for AAIT/PRG**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
  - Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

### General Education Requirements for the AAIT/PRG

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### Degree Requirements for AAIT/PRG

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

### Academic Progression Requirements for the AAIT/PRG

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

### Residency Requirements for the AAIT/PRG

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/PRG**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 236 ..... 3 credits

**Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 ..... 3 credits

**Intro to Web Design II**

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 215 ..... 3 credits

**JAVA Programming**

JAVA has rapidly become the language of choice for platform independent implementations. This course provides a general introduction to programming, data structures and object-oriented programming in particular. The syntax and semantics of the JAVA language are addressed, as well as related topics which include object-oriented programming concepts, terminology, and notation. This class requires the Java2 Software Development Kit, Student Edition V, 1.4.2\_02 2003.

IT 218 ..... 3 credits

**Introduction to C/C++**

This course introduces the student to C/C++ programming. The syntax and semantics of the C/C++ programming language are used to produce simple computer programs.

COM 150 ..... 3 credits

**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits

**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits

**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits

**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits

**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Concentration in Information Technology/Web Design**

The following Associate of Arts/Concentration in Information Technology/Web Design (AAIT/WD) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

The Associate of Arts Degree with a concentration in Information Technology /Web Design focuses on the application of web authoring tools, HTML, programming language, and web standards to design and implement websites for a variety of business applications.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-wd>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Web Design - Track A and B**

IT 205 ~ .....	3 credits
Management Information Systems	
IT 210 ~ .....	3 credits
Fundamentals of Programming with Algorithms and Logic	
IT 235 ~ .....	3 credits
Image Editing and Implementation	
IT 236 ~ .....	3 credits
Intro to Web Design I	
IT 237 ~ .....	3 credits
Intro to Web Design II	
IT 238 ~ .....	3 credits
Web Systems	

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/WD**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
  - Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

**General Education Requirements for the AAIT/WD**

- Communication Arts Requirement 6 credits  
(A Track must include: COM 150 and COM 220)  
(B Track must include: COM 155 and COM 156)
- Mathematics Requirement 6 credits
- Science & Technology Requirement 6 credits  
(A Track must include: 3 credits in the physical or biological sciences)  
(B Track must include: SCI 162)
- Social Science Requirement 6 credits  
(A Track must include: ETH 125)  
(B Track must include: PSY 201 and ETH 125)
- Humanities Requirement 6 credits  
(A Track must include: CRT 205)  
(B Track must include: HUM 111)
- Additional Liberal Arts Requirement 3 credits  
(A Track must include: GEN 105)  
(B Track must include: US 101)
- Interdisciplinary Requirement 9 credits  
(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for AAIT/WD**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/WD**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

**Residency Requirements for the AAIT/WD**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/WD**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 235 ..... 3 credits

**Image Editing and Implementation**

Design elements such as basic composition, style, use of color, textures, graphic manipulation, photographic re-touching and text/ font design are introduced. File formats, sizing and packaging for export are covered in this class. Concepts such as pre-press production and printing are introduced. Imaging program, Adobe Photoshop® Elements 3.0 is required for this class.

IT 236 ..... 3 credits

**Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 ..... 3 credits

**Intro to Web Design II**

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 238 ..... 3 credits

**Web Systems**

This course builds upon a foundational understanding of Web design and examines professional Web development technologies. Topics include dynamic hypertext markup language (DHMTL), interactive technologies, advanced use of presentational technologies and Web 2.0. Emphasis is placed upon the appropriate use of Web programming tools and professional development standards.

COM 150 .....3 credits  
**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 .....3 credits  
**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 .....3 credits  
**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 .....3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Emphasis in Information Technology/Web Design (Maryland-Online)**

*The following Associate of Arts/Emphasis in Information Technology/Web Design (AAIT/WD) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts Degree with an emphasis in Information Technology /Web Design focuses on the application of web authoring tools, HTML, programming language, and web standards to design and implement websites for a variety of business applications.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-wd>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Emphasis in Information Technology/Web Design - Track A and B**

- IT 205 ~ .....3 credits  
Management Information Systems
- IT 210 ~ .....3 credits  
Fundamentals of Programming with Algorithms and Logic
- IT 235 ~ .....3 credits  
Image Editing and Implementation
- IT 236 ~ .....3 credits  
Intro to Web Design I
- IT 237 ~ .....3 credits  
Intro to Web Design II
- IT 238 ~ .....3 credits  
Web Systems

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/WD**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/WD**

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for AAIT/WD**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the emphasis. Emphases are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/WD**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or emphasis courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the emphasis and cannot count toward General Education totals.

**Residency Requirements for the AAIT/WD**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/WD**

IT 205 .....3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 .....3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 235 .....3 credits

**Image Editing and Implementation**

Design elements such as basic composition, style, use of color, textures, graphic manipulation, photographic re-touching and text/font design are introduced. File formats, sizing and packaging for export are covered in this class. Concepts such as pre-press production and printing are introduced. Imaging program, Adobe Photoshop® Elements 3.0 is required for this class.

IT 236 .....3 credits

**Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 .....3 credits

**Intro to Web Design II**

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 238 .....3 credits

**Web Systems**

This course builds upon a foundational understanding of Web design and examines professional Web development technologies. Topics include dynamic hypertext markup language (DHMTL), interactive technologies, advanced use of presentational technologies and Web 2.0. Emphasis is placed upon the appropriate use of Web programming tools and professional development standards.

COM 150 .....3 credits

**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 .....3 credits

**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 .....3 credits

**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits

**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 .....3 credits

**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

### Associate of Arts/Concentration in Information Technology/Information Technology Support

The following Associate of Arts/Concentration in Information Technology/Information Technology Support (AAIT/ITS) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

The Associate of Arts Degree with a concentration in Information Technology/Information Technology Support covers theory and practice to provide a foundation in hardware and software computer support. Online labs give students hands on experience in hardware, software, networking and security fundamentals. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-its>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

#### Concentration in Information Technology/Information Technology Support - Track A and B

IT 205 ~.....	3 credits
Management of Information Systems	
IT 206 ~.....	3 credits
PC Applications Support	
IT 280 ~.....	3 credits
Computer Hardware Fundamentals	
IT 282 ~.....	3 credits
Computer Software Fundamentals	
IT 284 ~.....	3 credits
Enterprise Computer Support	
IT 286 ~.....	3 credits
Computer Maintenance and Troubleshooting	

The University reserves the right to modify the required course of study.

#### Additional Admission Requirements for AAIT/ITS

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
  - Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

#### General Education Requirements for the AAIT/ITS

- Communication Arts Requirement 6 credits  
(A Track must include: COM 150 and COM 220)  
(B Track must include: COM 155 and COM 156)
- Mathematics Requirement 6 credits
- Science & Technology Requirement 6 credits  
(A Track must include: 3 credits in the physical or biological sciences)  
(B Track must include: SCI 162)
- Social Science Requirement 6 credits  
(A Track must include: ETH 125)  
(B Track must include: PSY 201 and ETH 125)
- Humanities Requirement 6 credits  
(A Track must include: CRT 205)  
(B Track must include: HUM 111)
- Additional Liberal Arts Requirement 3 credits  
(A Track must include: GEN 105)  
(B Track must include: US 101)
- Interdisciplinary Requirement 9 credits  
(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

#### Degree Requirements for AAIT/ITS

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

#### Academic Progression Requirements for the AAIT/ITS

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

**Residency Requirements for the AAIT/ITS**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/ITS**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 206 ..... 3 credits

**PC Applications Support**

This course will prepare students to support Microsoft Office applications. The student will learn the product features of Word, Excel, PowerPoint, Outlook and Access. This course is based on the requirements of the Microsoft Office Specialist certification.

IT 280 ..... 3 credits

**Computer Hardware Fundamentals**

This course is an introduction to computer support fundamentals of personal computer (PC) hardware architecture, components, networking, configuration, upgrading, and repair. Activities that are critical to this course include remote access to hands-on LiveLabs and Scenarios.

IT 282 ..... 3 credits

**Computer Software Fundamentals**

This course is an introduction to the fundamentals of the Vista and legacy Windows Operating Systems (98/ME, 2000/XP) for computer software configuration, file management, performance monitoring, optimization, maintenance, recover and security. Activities that are critical to this course include remote access to hands-on LiveLabs and Scenarios.

IT 284 ..... 3 credits

**Enterprise Computer Support**

This course is an introduction to the roles, responsibilities, and skills required to become a professional computer support PC Technician and provide exceptional computer support service. This includes the fundamentals of customer service, effective questioning, verbal and non-verbal communication, on-site support, telephone support, remote e-commerce support, and dealing with difficult customers. This course includes remote access to hands-on, real-world customer support issues and Scenarios.

IT 286 ..... 3 credits

**Computer Maintenance and Troubleshooting**

This course is an introduction to computer hardware and software maintenance and troubleshooting. Each Module of the course will focus on typical problem scenarios, diagnostics, procedures and solutions. The final Module of this course provides you with a problem scenario to demonstrate your understanding of diagnostic skills and solution implementation. This course includes remote access to hands-on LiveLabs and Scenarios.

COM 150 ..... 3 credits  
**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits  
**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits  
**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Emphasis in Information Technology/Information Technology Support (Maryland-Online)**

*The following Associate of Arts/Emphasis in Information Technology/Information Technology Support (AAIT/ITS) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts Degree with an emphasis in Information Technology/Information Technology Support covers theory and practice to provide a foundation in hardware and software computer support. Online labs give students hands on experience in hardware, software, networking and security fundamentals. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-its>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Emphasis in Information Technology/Information Technology Support - Track A and B**

- IT 205 ~ ..... 3 credits  
Management of Information Systems
- IT 206 ~ ..... 3 credits  
PC Applications Support
- IT 280 ~ ..... 3 credits  
Computer Hardware Fundamentals
- IT 282 ~ ..... 3 credits  
Computer Software Fundamentals
- IT 284 ~ ..... 3 credits  
Enterprise Computer Support
- IT 286 ~ ..... 3 credits  
Computer Maintenance and Troubleshooting

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/ITS**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

### General Education Requirements for the AAIT/ITS

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### Degree Requirements for AAIT/ITS

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the emphasis. Emphases are reflected on the transcript only.

### Academic Progression Requirements for the AAIT/ITS

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or emphasis courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the emphasis and cannot count toward General Education totals.

### Residency Requirements for the AAIT/ITS

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/ITS**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 206 ..... 3 credits

**PC Applications Support**

This course will prepare students to support Microsoft Office applications. The student will learn the product features of Word, Excel, PowerPoint, Outlook and Access. This course is based on the requirements of the Microsoft Office Specialist certification.

IT 280 ..... 3 credits

**Computer Hardware Fundamentals**

This course is an introduction to computer support fundamentals of personal computer (PC) hardware architecture, components, networking, configuration, upgrading, and repair. Activities that are critical to this course include remote access to hands-on LiveLabs and Scenarios.

IT 282 ..... 3 credits

**Computer Software Fundamentals**

This course is an introduction to the fundamentals of the Vista and legacy Windows Operating Systems (98/ME, 2000/XP) for computer software configuration, file management, performance monitoring, optimization, maintenance, recover and security. Activities that are critical to this course include remote access to hands-on LiveLabs and Scenarios.

IT 284 ..... 3 credits

**Enterprise Computer Support**

This course is an introduction to the roles, responsibilities, and skills required to become a professional computer support PC Technician and provide exceptional computer support service. This includes the fundamentals of customer service, effective questioning, verbal and non-verbal communication, on-site support, telephone support, remote e-commerce support, and dealing with difficult customers. This course includes remote access to hands-on, real-world customer support issues and Scenarios.

IT 286 ..... 3 credits

**Computer Maintenance and Troubleshooting**

This course is an introduction to computer hardware and software maintenance and troubleshooting. Each Module of the course will focus on typical problem scenarios, diagnostics, procedures and solutions. The final Module of this course provides you with a problem scenario to demonstrate your understanding of diagnostic skills and solution implementation. This course includes remote access to hands-on LiveLabs and Scenarios.

COM 150 ..... 3 credits

**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits

**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits

**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits

**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits

**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Concentration in Information Technology/Database Development Concentration**

The following Associate of Arts/Concentration in Information Technology/Database Development Concentration (AAIT/DBD) degree program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

This concentration focuses on the installation and programming of database applications in the business environment. The development of queries and reports from a database are addressed in this program as well as the backup, recovery, and security of databases. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-dbd>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Database Development - Track A and B**

IT 205~ .....	3 credits
Management of Information Systems	
IT 210~ .....	3 credits
Fundamentals of Programming with Algorithms & Logic	
IT 260~ .....	3 credits
Intro to Desktop Databases	
IT 261~ .....	3 credits
Advanced Desktop Databases	
IT 264~ .....	3 credits
Introduction to SQL	
IT 265~ .....	3 credits
Managing the Database Environment	

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/DBD**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
  - Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.

**General Education Requirements for the AAIT/DBD**

- Communication Arts Requirement 6 credits  
(A Track must include: COM 150 and COM 220)  
(B Track must include: COM 155 and COM 156)
- Mathematics Requirement 6 credits
- Science & Technology Requirement 6 credits  
(A Track must include: 3 credits in the physical or biological sciences)  
(B Track must include: SCI 162)
- Social Science Requirement 6 credits  
(A Track must include: ETH 125)  
(B Track must include: PSY 201 and ETH 125)
- Humanities Requirement 6 credits  
(A Track must include: CRT 205)  
(B Track must include: HUM 111)
- Additional Liberal Arts Requirement 3 credits  
(A Track must include: GEN 105)  
(B Track must include: US 101)
- Interdisciplinary Requirement 9 credits  
(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for AAIT/DBD**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/DBD**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

**Residency Requirements for the AAIT/DBD**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/DBD**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 260 ..... 3 credits

**Introduction to Desktop Databases**

This course will cover the use desktop database software to create small database applications. Emphasis will be placed on creating databases and forms. Hands-on experience in the installation, design, and debugging of desktop database software will be included in this course.

IT 261 ..... 3 credits

**Advanced Desktop Databases**

This course is a continuation in the study of desktop database software. Emphasis will be placed on database design, reporting, queries and data analysis using desktop database software.

IT 264 ..... 3 credits

**Introduction to SQL**

This course provides an introduction to the Structured Query Language (SQL) that provides a unified language that lets you query, manipulate, or control data in a business applications environment.

IT 265 ..... 3 credits

**Managing the Database Environment**

This course provides an introduction to the installation, configuration, support, availability and recovery databases. The considerations for database administration addressing the requirements for user access, security, backup and recovery will be covered in this course.

COM 150 .....3 credits  
**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 .....3 credits  
**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 .....3 credits  
**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 .....3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Emphasis in Information Technology/Database Development Emphasis (Maryland-Online)**

*The following Associate of Arts/Emphasis in Information Technology/Database Development Emphasis (AAIT/DBD) degree program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

This emphasis focuses on the installation and programming of database applications in the business environment. The development of queries and reports from a database are addressed in this program as well as the backup, recovery, and security of databases. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-dbd>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Emphasis in Information Technology/Database Development - Track A and B**

IT 205~ .....3 credits  
 Management of Information Systems

IT 210~ .....3 credits  
 Fundamentals of Programming with Algorithms & Logic

IT 260~ .....3 credits  
 Intro to Desktop Databases

IT 261~ .....3 credits  
 Advanced Desktop Databases

IT 264~ .....3 credits  
 Introduction to SQL

IT 265~ .....3 credits  
 Managing the Database Environment

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/DBD**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/DBD**

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 6 credits

(A Track must include: 3 credits in the physical or biological sciences)

(B Track must include: SCI 162)

Social Science Requirement 6 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 6 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 105)

(B Track must include: US 101)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for AAIT/DBD**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the emphasis. Emphases are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/DBD**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or emphasis courses.

- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the emphasis and cannot count toward General Education totals.

**Residency Requirements for the AAIT/DBD**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/DBD**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 260 ..... 3 credits

**Introduction to Desktop Databases**

This course will cover the use desktop database software to create small database applications. Emphasis will be placed on creating databases and forms. Hands-on experience in the installation, design, and debugging of desktop database software will be included in this course.

IT 261 ..... 3 credits

**Advanced Desktop Databases**

This course is a continuation in the study of desktop database software. Emphasis will be placed on database design, reporting, queries and data analysis using desktop database software.

IT 264 ..... 3 credits

**Introduction to SQL**

This course provides an introduction to the Structured Query Language (SQL) that provides a unified language that lets you query, manipulate, or control data in a business applications environment.

IT 265 ..... 3 credits

**Managing the Database Environment**

This course provides an introduction to the installation, configuration, support, availability and recovery databases. The considerations for database administration addressing the requirements for user access, security, backup and recovery will be covered in this course.

COM 150 ..... 3 credits

**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits

**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

ETH 125 ..... 3 credits

**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits

**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits

**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

### Associate of Arts/Concentration in Information Technology (Minnesota/Arkansas)

The following Associate of Arts/Concentration in Information Technology (AAIT) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.

The Associate of Arts with a concentration in Information Technology focuses on basic understanding of programming practices, web design and the creation of web pages, local and wide area networking and information systems security. Courses build upon the fundamentals of information technology to give students the skills needed to address and solve real-world IT problems.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-ar>.

For students residing in Minnesota: For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-mn>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

#### Concentration in Information Technology

IT 210 ~.....	3 credits
Fundamentals of Programming with Algorithms & Logic	
IT 236 ~.....	3 credits
Intro to Web Design I	
IT 237 ~.....	3 credits
Intro to Web Design II	
IT 240 ~.....	3 credits
Introduction to LAN Technologies	
IT 242 ~.....	3 credits
Introduction to WAN Technologies	

The University reserves the right to modify the required course of study.

#### Additional Admission Requirements for AAIT

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

### General Education Requirements for the AAIT for Arkansas Students

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Students, who reside in Arkansas, are required to complete MAT 220 College Algebra. The MAT 220 requirement may be satisfied with College Algebra transfer coursework or math transfer coursework requiring College Algebra as a prerequisite.

Arkansas residents must include: MAT 219 and MAT 220

Science & Technology Requirement 9 credits

Must include: BIO 100 and CHM 109

Students in the AAIT and AAIT/WD programs must complete IT 205 as a required Science course as this course is a prerequisite to courses in the concentration.

The BIO 100 and CHM 109 requirements may also be satisfied with any science transfer coursework with a lab component.

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Must include: HIS 135

HIS 135 requirement may also be satisfied with any transfer coursework with US History or Government content.

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### General Education Requirements for the AAIT for Minnesota Students

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 9 credits

(B Track must include: SCI 162)

Students in the AAIT and AAIT/WD programs must complete IT 205 as a required Science course as this course is a prerequisite to courses in the concentration.

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

#### **Degree Requirements for the AAIT**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

#### **Academic Progression Requirements for the AAIT**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.

- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

#### **Residency Requirements for the AAIT**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

#### **Course Descriptions for the AAIT**

IT 210 ..... 3 credits

##### **Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 236 ..... 3 credits

##### **Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 ..... 3 credits

### **Intro to Web Design II**

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 240 ..... 3 credits

### **LAN Technologies**

This foundational course covers local area network (LAN) topics including rationale for networking, Open Systems Interconnection (OSI) models, common network topologies and architecture, client/server concepts, basic hardware devices and usage, and basic networking security concepts.

IT 242 ..... 3 credits

### **Introduction to WAN Technologies**

This course covers Wide Area Networking/Enterprise networking concepts and its interface with metropolitan area networks (MAN) and local area networks (LAN). The course will cover telecommunication technologies, backbone technologies, hardware device protocol, hardware selection and usage, and basic WAN security considerations and planning.

COM 150 ..... 3 credits

### **Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits

### **Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

MAT 219 ..... 3 credits

### **Introduction to College Algebra**

This course introduces algebraic concepts providing a solid foundation for college algebra. Topics range from properties of real numbers, the order of operations, and algebraic expressions to solving equations and inequalities. Additional topics include polynomials, factoring methods, rational and radical expressions as well as graphing and functions.

MAT 220 ..... 3 credits

### **College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

BIO 100 ..... 4 credits

### **Introduction to Life Science with Lab**

This course applies a broad, conceptual understanding of biology. Students are introduced to scientific ideologies and concepts that not only shape the biological world, but also shape humans. Students examine the scientific method, evolution and biodiversity, the biology of cells, physiology, the dynamics of inheritance, and the effect humans have on the environment. The text emphasizes methods and the theoretical foundations of ideas, while minimizing isolated facts. It stresses the integration of ideas, making connections that form an understanding of the living world. The weekly online labs add a practical component to the class. The labs build upon the concepts in the text and offer a chance to interact with the material and further their understanding.

CHM 109 ..... 3 credits

### **Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

IT 205 ..... 3 credits

### **Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

HIS 135 ..... 3 credits

### **The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying historical perspective to analyze contemporary issues.

ETH 125 ..... 3 credits

### **Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits

### **Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 .....3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Concentration in Information Technology/Networking (Minnesota/Arkansas)**

*The following Associate of Arts/Concentration in Information Technology/Networking (AAIT/N) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts in Information Technology/Networking concentration focuses on information systems and the analysis, design, and security of modern computer networks. Courses emphasize Local Area Networks, Wireless Local Area Networks, Wide Area Networks, and network security. Students will be able to simulate network administration tasks through remote access to real hardware and software commonly used in the IT industry. Additionally, courses include scenario-based activities, placing students in real-world situations that allow them to apply foundational knowledge and skills.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/ait-n>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Networking - Track A and B**

IT 205 ~ .....3 credits  
 Management Information Systems

IT 210 ~ .....3 credits  
 Fundamentals of Programming with Algorithms and Logic

IT 240 ~ .....3 credits  
 Intro to LAN Technologies

IT 241 ~ .....3 credits  
 Intro to W-LAN Technologies

IT 242 ~ .....3 credits  
 Intro to WAN Technologies

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/N**

- Applicants must be at least 16 years of age at the time of application.

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/N for Arkansas Students**

Communication Arts Requirement 6 credits  
 (A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

*Students, who reside in Arkansas, are required to complete MAT 220 College Algebra. The MAT 220 requirement may be satisfied with College Algebra transfer coursework or math transfer coursework requiring College Algebra as a prerequisite.*

*Must include: MAT 219 and MAT 220*

Science & Technology Requirement 9 credits  
 (B Track must include: SCI 162)

*Must include: BIO 100 and CHM 109*

*The BIO 100 and CHM 109 requirements may also be satisfied with any science transfer coursework with a lab component.*

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

*Must include: HIS 135*

*HIS 135 requirement may also be satisfied with any transfer coursework with US History or Government content.*

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**General Education Requirements for the AAIT/N for Minnesota Students**

Communication Arts Requirement 6 credits  
 (A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 9 credits

(B Track must include: SCI 162)

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

#### **Degree Requirements for the AAIT/N**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

#### **Academic Progression Requirements for the AAIT/N**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.

- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

#### **Residency Requirements for the AAIT/N**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

#### **Course Descriptions for the AAIT/N**

IT 205..... 3 credits

##### **Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

##### **Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 240 .....3 credits  
**LAN Technologies**

This foundational course covers local area network (LAN) topics including rationale for networking, Open Systems Interconnection (OSI) models, common network topologies and architecture, client/server concepts, basic hardware devices and usage, and basic networking security concepts.

IT 241 .....3 credits  
**Introduction to W-LAN Technologies**

Concepts of wireless networking systems include wireless networking topologies, hardware protocols, hardware selection and implementation, interfaces with MAN, LAN and WAN networks, basic wireless security and integration concepts.

IT 242 .....3 credits  
**Introduction to WAN Technologies**

This course covers Wide Area Networking/Enterprise networking concepts and its interface with metropolitan area networks (MAN) and local area networks (LAN). The course will cover telecommunication technologies, backbone technologies, hardware device protocol, hardware selection and usage, and basic WAN security considerations and planning.

COM 150 .....3 credits  
**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 .....3 credits  
**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

MAT 219 .....3 credits  
**Introduction to College Algebra**

This course introduces algebraic concepts providing a solid foundation for college algebra. Topics range from properties of real numbers, the order of operations, and algebraic expressions to solving equations and inequalities. Additional topics include polynomials, factoring methods, rational and radical expressions as well as graphing and functions.

MAT 220 .....3 credits  
**College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

BIO 100 .....4 credits  
**Introduction to Life Science with Lab**

This course applies a broad, conceptual understanding of biology. Students are introduced to scientific ideologies and concepts that not only shape the biological world, but also shape humans. Students examine the scientific method, evolution and biodiversity, the biology of cells, physiology, the dynamics of inheritance, and the effect humans have on the environment. The text emphasizes methods and the theoretical foundations of ideas, while minimizing isolated facts. It stresses the integration of ideas, making connections that form an understanding of the living world. The weekly online labs add a practical component to the class. The labs build upon the concepts in the text and offer a chance to interact with the material and further their understanding.

CHM 109 .....3 credits  
**Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 135 .....3 credits  
**The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying historical perspective to analyze contemporary issues.

ETH 125 .....3 credits  
**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Concentration in Information Technology/Web Design (Minnesota/Arkansas)**

*The following Associate of Arts/Concentration in Information Technology/Web Design (AAIT/WD) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts Degree with a concentration in Information Technology /Web Design focuses on the application of web authoring tools, HTML, programming language, and web standards to design and implement websites for a variety of business applications.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-wd>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Web Design - Track A and B**

IT 210 ~ ..... 3 credits  
 Fundamentals of Programming with Algorithms and Logic

IT 235 ~ ..... 3 credits  
 Image Editing and Implementation

IT 236 ~ ..... 3 credits  
 Intro to Web Design I

IT 237 ~ ..... 3 credits  
 Intro to Web Design II

IT 238 ~ ..... 3 credits  
 Web Systems

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/WD**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/WD for Arkansas Students**

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

*Students, who reside in Arkansas, are required to complete MAT 220 College Algebra. The MAT 220 requirement may be satisfied with College Algebra transfer coursework or math transfer coursework requiring College Algebra as a prerequisite.*

*Arkansas residents must include: MAT 219 and MAT 220*

Science & Technology Requirement 9 credits

Must include: BIO 100 and CHM 109

*Students in the AAIT and AAIT/WD programs must complete IT 205 as a required Science course as this course is a prerequisite to courses in the concentration.*

*The BIO 100 and CHM 109 requirements may also be satisfied with any science transfer coursework with a lab component.*

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Must include: HIS 135

*HIS 135 requirement may also be satisfied with any transfer coursework with US History or Government content.*

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**General Education Requirements for the AAIT/WD for Minnesota Students**

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 9 credits

(B Track must include: SCI 162)

*Students in the AAIT and AAIT/WD programs must complete IT 205 as a required Science course as this course is a prerequisite to courses in the concentration.*

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for the AAIT/WD**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/WD**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.

- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

**Residency Requirements for the AAIT/WD**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/WD**

IT 210 ..... 3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 235 ..... 3 credits

**Image Editing and Implementation**

Design elements such as basic composition, style, use of color, textures, graphic manipulation, photographic re-touching and text/ font design are introduced. File formats, sizing and packaging for export are covered in this class. Concepts such as pre-press production and printing are introduced. Imaging program, Adobe Photoshop® Elements 3.0 is required for this class.

IT 236 ..... 3 credits

### Intro to Web Design I

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 237 ..... 3 credits

### Intro to Web Design II

This course focuses on the creation of robust, well-formatted, esthetically pleasing, text-based Web pages. Students create Web pages using Hypertext Markup Language (HTML), and discussion centers on how to publish completed pages and advertise those pages on the Web.

IT 238 ..... 3 credits

### Web Development

This course builds upon a foundational understanding of Web design and examines professional Web development technologies. Topics include dynamic hypertext markup language (DHMTL), interactive technologies, advanced use of presentational technologies and Web 2.0. Emphasis is placed upon the appropriate use of Web programming tools and professional development standards.

COM 150 ..... 3 credits

### Effective Essay Writing

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits

### Research Writing

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

MAT 219 ..... 3 credits

### Introduction to College Algebra

This course introduces algebraic concepts providing a solid foundation for college algebra. Topics range from properties of real numbers, the order of operations, and algebraic expressions to solving equations and inequalities. Additional topics include polynomials, factoring methods, rational and radical expressions as well as graphing and functions.

MAT 220 ..... 3 credits

### College Algebra

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

BIO 100 ..... 4 credits

### Introduction to Life Science with Lab

This course applies a broad, conceptual understanding of biology. Students are introduced to scientific ideologies and concepts that not only shape the biological world, but also shape humans. Students examine the scientific method, evolution and biodiversity, the biology of cells, physiology, the dynamics of inheritance, and the effect humans have on the environment. The text emphasizes methods and the theoretical foundations of ideas, while minimizing isolated facts. It stresses the integration of ideas, making connections that form an understanding of the living world. The weekly online labs add a practical component to the class. The labs build upon the concepts in the text and offer a chance to interact with the material and further their understanding.

CHM 109 ..... 3 credits

### Introductory Chemistry

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

IT 205 ..... 3 credits

### Management of Information Systems

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

HIS 135 ..... 3 credits

### The American Experience Since 1945

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying historical perspective to analyze contemporary issues.

ETH 125 ..... 3 credits

### Cultural Diversity

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits  
**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 .....3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Concentration in Information Technology/Information Technology Support (Minnesota/Arkansas)**

*The following Associate of Arts/Concentration in Information Technology/Information Technology Support (AAIT/ITS) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts Degree with a concentration in Information Technology/Information Technology Support covers theory and practice to provide a foundation in hardware and software computer support. Online labs give students hands on experience in hardware, software, networking and security fundamentals. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-its>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Information Technology Support - Track A and B**

IT 205 ~ .....3 credits  
 Management of Information Systems  
 IT 206 ~ .....3 credits  
 PC Applications Support  
 IT 280 ~ .....3 credits  
 Computer Hardware Fundamentals  
 IT 282 ~ .....3 credits  
 Computer Software Fundamentals  
 IT 284 ~ .....3 credits  
 Enterprise Computer Support

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/ITS**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/ITS for Arkansas Students**

Communication Arts Requirement 6 credits  
*(A Track must include: COM 150 and COM 220)*  
*(B Track must include: COM 155 and COM 156)*  
 Mathematics Requirement 6 credits  
*Students, who reside in Arkansas, are required to complete MAT 220 College Algebra. The MAT 220 requirement may be satisfied with College Algebra transfer coursework or math transfer coursework requiring College Algebra as a prerequisite.*

*Must include: MAT 219 and MAT 220*  
 Science & Technology Requirement 9 credits  
*(B Track must include: SCI 162)*

*Must include: BIO 100 and CHM 109*  
*The BIO 100 and CHM 109 requirements may also be satisfied with any science transfer coursework with a lab component.*

Social Science Requirement 9 credits  
*(A Track must include: ETH 125)*  
*(B Track must include: PSY 201 and ETH 125)*

*Must include: HIS 135*  
*HIS 135 requirement may also be satisfied with any transfer coursework with US History or Government content.*

Humanities Requirement 9 credits  
*(A Track must include: CRT 205)*  
*(B Track must include: HUM 111)*

Additional Liberal Arts Requirement 6 credits  
*(A Track must include: GEN 105)*  
*(B Track must include: US 101 and FP 101)*  
 Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**General Education Requirements for the AAIT/ITS for Minnesota Students**

Communication Arts Requirement 6 credits  
*(A Track must include: COM 150 and COM 220)*  
*(B Track must include: COM 155 and COM 156)*

Mathematics Requirement 6 credits  
 Science & Technology Requirement 9 credits  
*(B Track must include: SCI 162)*

Social Science Requirement 9 credits  
*(A Track must include: ETH 125)*  
*(B Track must include: PSY 201 and ETH 125)*

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### **Degree Requirements for the AAIT/ITS**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

### **Academic Progression Requirements for the AAIT/ITS**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.

- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

### **Residency Requirements for the AAIT/ITS**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

### **Course Descriptions for the AAIT/ITS**

IT 205 ..... 3 credits

#### **Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 206 .....3 credits  
**PC Applications Support**  
 This course will prepare students to support Microsoft Office applications. The student will learn the product features of Word, Excel, PowerPoint, Outlook and Access. This course is based on the requirements of the Microsoft Office Specialist certification.

IT 280 .....3 credits  
**Computer Hardware Fundamentals**  
 This course is an introduction to computer support fundamentals of personal computer (PC) hardware architecture, components, networking, configuration, upgrading, and repair. Activities that are critical to this course include remote access to hands-on LiveLabs and Scenarios.

IT 282 .....3 credits  
**Computer Software Fundamentals**  
 This course is an introduction to the fundamentals of the Vista and legacy Windows Operating Systems (98/ME, 2000/XP) for computer software configuration, file management, performance monitoring, optimization, maintenance, recover and security. Activities that are critical to this course include remote access to hands-on LiveLabs and Scenarios.

IT 284 .....3 credits  
**Enterprise Computer Support**  
 This course is an introduction to the roles, responsibilities, and skills required to become a professional computer support PC Technician and provide exceptional computer support service. This includes the fundamentals of customer service, effective questioning, verbal and non-verbal communication, on-site support, telephone support, remote e-commerce support, and dealing with difficult customers. This course includes remote access to hands-on, real-world customer support issues and Scenarios.

COM 150 .....3 credits  
**Effective Essay Writing**  
 In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 .....3 credits  
**Research Writing**  
 Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

MAT 219 .....3 credits  
**Introduction to College Algebra**  
 This course introduces algebraic concepts providing a solid foundation for college algebra. Topics range from properties of real numbers, the order of operations, and algebraic expressions to solving equations and inequalities. Additional topics include polynomials, factoring methods, rational and radical expressions as well as graphing and functions.

MAT 220 .....3 credits  
**College Algebra**  
 This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

BIO 100 .....4 credits  
**Introduction to Life Science with Lab**  
 This course applies a broad, conceptual understanding of biology. Students are introduced to scientific ideologies and concepts that not only shape the biological world, but also shape humans. Students examine the scientific method, evolution and biodiversity, the biology of cells, physiology, the dynamics of inheritance, and the effect humans have on the environment. The text emphasizes methods and the theoretical foundations of ideas, while minimizing isolated facts. It stresses the integration of ideas, making connections that form an understanding of the living world. The weekly online labs add a practical component to the class. The labs build upon the concepts in the text and offer a chance to interact with the material and further their understanding.

CHM 109 .....3 credits  
**Introductory Chemistry**  
 This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 135 .....3 credits  
**The American Experience Since 1945**  
 This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying historical perspective to analyze contemporary issues.

ETH 125 .....3 credits  
**Cultural Diversity**  
 This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits  
**Critical Thinking**  
 In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Concentration in Information Technology/Database Development Concentration (Minnesota/Arkansas)**

*The following Associate of Arts/Concentration in Information Technology/Database Development Concentration (AAIT/DBD) degree program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

This concentration focuses on the installation and programming of database applications in the business environment. The development of queries and reports from a database are addressed in this program as well as the backup, recovery, and security of databases. For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aait-dbd>.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Database Development - Track A and B**

IT 205~ ..... 3 credits  
 Management of Information Systems

IT 210~ ..... 3 credits  
 Fundamentals of Programming with Algorithms & Logic

IT 260~ ..... 3 credits  
 Intro to Desktop Databases

IT 261~ ..... 3 credits  
 Advanced Desktop Databases

IT 264~ ..... 3 credits  
 Introduction to SQL

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for AAIT/DBD**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/DBD for Arkansas Students**

Communication Arts Requirement 6 credits  
 (A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

*Students, who reside in Arkansas, are required to complete MAT 220 College Algebra. The MAT 220 requirement may be satisfied with College Algebra transfer coursework or math transfer coursework requiring College Algebra as a prerequisite.*

*Must include: MAT 219 and MAT 220*

Science & Technology Requirement 9 credits  
 (B Track must include: SCI 162)

*Must include: BIO 100 and CHM 109*

*The BIO 100 and CHM 109 requirements may also be satisfied with any science transfer coursework with a lab component.*

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

*Must include: HIS 135*

*HIS 135 requirement may also be satisfied with any transfer coursework with US History or Government content.*

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**General Education Requirements for the AAIT/DBD for Minnesota Students**

Communication Arts Requirement 6 credits

(A Track must include: COM 150 and COM 220)

(B Track must include: COM 155 and COM 156)

Mathematics Requirement 6 credits

Science & Technology Requirement 9 credits

(B Track must include: SCI 162)

Social Science Requirement 9 credits

(A Track must include: ETH 125)

(B Track must include: PSY 201 and ETH 125)

Humanities Requirement 9 credits

(A Track must include: CRT 205)

(B Track must include: HUM 111)

Additional Liberal Arts Requirement 6 credits

(A Track must include: GEN 105)

(B Track must include: US 101 and FP 101)

Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

### Degree Requirements for the AAIT/DBD

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

### Academic Progression Requirements for the AAIT/DBD

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.

- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

### Residency Requirements for the AAIT/DBD

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

### Course Descriptions for the AAIT/DBD

IT 205 ..... 3 credits

#### Management of Information Systems

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

#### Fundamentals of Programming with Algorithms and Logic

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 260 ..... 3 credits

#### **Introduction to Desktop Databases**

This course will cover the use desktop database software to create small database applications. Emphasis will be placed on creating databases and forms. Hands-on experience in the installation, design, and debugging of desktop database software will be included in this course.

IT 261 ..... 3 credits

#### **Advanced Desktop Databases**

This course is a continuation in the study of desktop database software. Emphasis will be placed on database design, reporting, queries and data analysis using desktop database software.

IT 264 ..... 3 credits

#### **Introduction to SQL**

This course provides an introduction to the Structured Query Language (SQL) that provides a unified language that lets you query, manipulate, or control data in a business applications environment.

COM 150 ..... 3 credits

#### **Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 ..... 3 credits

#### **Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

MAT 219 ..... 3 credits

#### **Introduction to College Algebra**

This course introduces algebraic concepts providing a solid foundation for college algebra. Topics range from properties of real numbers, the order of operations, and algebraic expressions to solving equations and inequalities. Additional topics include polynomials, factoring methods, rational and radical expressions as well as graphing and functions.

MAT 220 ..... 3 credits

#### **College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

BIO 100 ..... 4 credits

#### **Introduction to Life Science with Lab**

This course applies a broad, conceptual understanding of biology. Students are introduced to scientific ideologies and concepts that not only shape the biological world, but also shape humans. Students examine the scientific method, evolution and biodiversity, the biology of cells, physiology, the dynamics of inheritance, and the effect humans have on the environment. The text emphasizes methods and the theoretical foundations of ideas, while minimizing isolated facts. It stresses the integration of ideas, making connections that form an understanding of the living world. The weekly online labs add a practical component to the class. The labs build upon the concepts in the text and offer a chance to interact with the material and further their understanding.

CHM 109 ..... 3 credits

#### **Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 135 ..... 3 credits

#### **The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying historical perspective to analyze contemporary issues.

ETH 125 ..... 3 credits

#### **Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 ..... 3 credits

#### **Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 .....3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Associate of Arts/Concentration in Information Technology/Programming (Minnesota/Arkansas)**

*The following Associate of Arts/Concentration in Information Technology/Programming (AAIT/PRG) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

A concentration in Programming offers coursework in computer scripting and programming.  
 For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/aaait-prg>.  
 Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Concentration in Information Technology/Programming - Track A and B**

- IT 205 ~ .....3 credits  
Management of Information Systems
- IT 210 ~ .....3 credits  
Fundamentals of Programming with Algorithms and Logic
- IT 236 ~ .....3 credits  
Intro to Web Design I
- IT 215 ~ .....3 credits  
Java Programming
- IT 218 ~ .....3 credits  
Introduction to C/C++

The University reserves the right to modify the required course of study

**Additional Admission Requirements for AAIT/PRG**

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**General Education Requirements for the AAIT/PRG for Arkansas Students**

- Communication Arts Requirement 6 credits  
(A Track must include: COM 150 and COM 220)  
(B Track must include: COM 155 and COM 156)
  - Mathematics Requirement 6 credits  
*Students, who reside in Arkansas, are required to complete MAT 220 College Algebra. The MAT 220 requirement may be satisfied with College Algebra transfer coursework or math transfer coursework requiring College Algebra as a prerequisite.*  
Must include: MAT 219 and MAT 220
  - Science & Technology Requirement 9 credits  
(B Track must include: SCI 162)  
Must include: BIO 100 and CHM 109  
*The BIO 100 and CHM 109 requirements may also be satisfied with any science transfer coursework with a lab component.*
  - Social Science Requirement 9 credits  
(A Track must include: ETH 125)  
(B Track must include: PSY 201 and ETH 125)  
Must include: HIS 135  
*HIS 135 requirement may also be satisfied with any transfer coursework with US History or Government content.*
  - Humanities Requirement 9 credits  
(A Track must include: CRT 205)  
(B Track must include: HUM 111)
  - Additional Liberal Arts Requirement 6 credits  
(A Track must include: GEN 105)  
(B Track must include: US 101 and FP 101)
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**General Education Requirements for the AAIT/PRG for Minnesota Students**

- Communication Arts Requirement 6 credits  
(A Track must include: COM 150 and COM 220)  
(B Track must include: COM 155 and COM 156)
  - Mathematics Requirement 6 credits
  - Science & Technology Requirement 9 credits  
(B Track must include: SCI 162)
  - Social Science Requirement 9 credits  
(A Track must include: ETH 125)  
(B Track must include: PSY 201 and ETH 125)
  - Humanities Requirement 9 credits  
(A Track must include: CRT 205)  
(B Track must include: HUM 111)
  - Additional Liberal Arts Requirement 6 credits  
(A Track must include: GEN 105)  
(B Track must include: US 101 and FP 101)
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total

**Degree Requirements for the AAIT/PRG**

The degree requirements for this program are the following:

- Completion of a minimum of 60 credits.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.
- Students transferring from Western International University to any University of Phoenix undergraduate program may transfer all coursework completed at Western International University with a grade of "D-" or higher.
- A minimum grade point average (GPA) of 2.0.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the core and cannot count toward General Education total
- The diploma awarded for this program will read as: Associate of Arts and will not reflect the concentration. Concentrations are reflected on the transcript only.

**Academic Progression Requirements for the AAIT/PRG**

- All students entering associate degree programs with less than 24 previous college credits, as recognized by the university on the admissions application, will be enrolled in the B Track and are required to complete the First-Year Sequence.
- US 101 will be required as the first course in the first block of the First-Year Sequence.
- HUM 111 will be required as the last course in the First-Year Sequence and may be taken concurrently with non-FYS or FYS courses. All other FYS requirements must be satisfied prior to enrolling in any other General education elective, or concentration courses.
- With the exception of GEN 105, US 101, FP 101, and HUM 111, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (15 credit limit on experiential learning; 15 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course.
- All students entering associate degree programs with 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 105 as part of the first block, and are not required to enroll in the First-Year Sequence. ETH 125 or an appropriate writing class have been recommended by the college as the second course in the first block; however, the student may choose an alternate course.

- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, and who do not enroll in the First-Year Sequence may not enroll in any course from the First-Year Sequence to satisfy General Education or Elective requirements.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- Credits applied to the Required Course of Study (with the exception of the electives) will only be applied to the concentration and cannot count toward General Education totals.

**Residency Requirements for the AAIT/PRG**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of Required Course of Study and General Education courses must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past ten years from current program enrollment agreement sign date with a grade of "C" (2.0) or better (five years for information technology courses).

The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

**Course Descriptions for the AAIT/PRG**

IT 205 ..... 3 credits

**Management of Information Systems**

This course introduces students to the world of information technology. Students will examine the technology concepts included in business systems, networking, and project management and explore the systems development life cycle. Specific topics for the course include: hardware components, software applications, operating systems, databases, programming, as well as the security, privacy, and safety issues associated with information technology.

IT 210 ..... 3 credits

**Fundamentals of Programming with Algorithms and Logic**

This course provides students with a basic understanding of programming practices. Concepts covered include flowcharting, pseudocode methodologies, and an understanding of programming practices. Students will learn how these concepts, when properly applied, improve program design.

IT 236 .....3 credits

**Intro to Web Design I**

Intro to Web Design I combines the study of foundational Web design principles with the practice of Web page construction to create business and e-business Web sites. Students conceptualize, design, and refine a Web site while satisfying class assignment and final project requirements. Students explore best practices for creating quality Web page layouts, navigation, appearance, functionality, and multimedia. Used to create basic designs are Adobe® Photoshop® Elements, and the Macromedia® Studio MX 2004 software package which includes Macromedia® Dreamweaver® and Macromedia® Flash®.

IT 215 .....3 credits

**JAVA Programming**

JAVA has rapidly become the language of choice for platform independent implementations. This course provides a general introduction to programming, data structures and object-oriented programming in particular. The syntax and semantics of the JAVA language are addressed, as well as related topics which include object-oriented programming concepts, terminology, and notation. This class requires the Java2 Software Development Kit, Student Edition V, 1.4.2\_02 2003.

IT 218 .....3 credits

**Introduction to C/C++**

This course introduces the student to C/C++ programming. The syntax and semantics of the C/C++ programming language are used to produce simple computer programs.

COM 150 .....3 credits

**Effective Essay Writing**

In this course, students develop academic writing skills. Students use the writing process to construct an expository essay with an emphasis on coherence and correctness in written communication. Students also conduct basic research for the expository essay. Selected readings provide the basis for discussion regarding the difference between fact and opinion. Grammar exercises focus on verb tense and form, subject-verb and pronoun-antecedent agreement, and pronoun case. Students also complete exercises covering topic sentences, paragraph development, citations, and formatting guidelines.

COM 220 .....3 credits

**Research Writing**

Students focus on gathering research, evaluating and documenting sources, and developing a major research paper. Selected readings prompt discussion regarding bias, rhetorical devices, arguments, and counterarguments. Grammar exercises address commonly confused words, modifiers, parallel structure, and sentence variety.

MAT 219 .....3 credits

**Introduction to College Algebra**

This course introduces algebraic concepts providing a solid foundation for college algebra. Topics range from properties of real numbers, the order of operations, and algebraic expressions to solving equations and inequalities. Additional topics include polynomials, factoring methods, rational and radical expressions as well as graphing and functions.

MAT 220 .....3 credits

**College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

BIO 100 .....4 credits

**Introduction to Life Science with Lab**

This course applies a broad, conceptual understanding of biology. Students are introduced to scientific ideologies and concepts that not only shape the biological world, but also shape humans. Students examine the scientific method, evolution and biodiversity, the biology of cells, physiology, the dynamics of inheritance, and the effect humans have on the environment. The text emphasizes methods and the theoretical foundations of ideas, while minimizing isolated facts. It stresses the integration of ideas, making connections that form an understanding of the living world. The weekly online labs add a practical component to the class. The labs build upon the concepts in the text and offer a chance to interact with the material and further their understanding.

CHM 109 .....3 credits

**Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 135 .....3 credits

**The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying historical perspective to analyze contemporary issues.

ETH 125 .....3 credits

**Cultural Diversity**

This course is designed to educate students about issues of race, ethnicity, and gender in the United States by presenting historical and modern perspectives on diversity.

CRT 205 .....3 credits

**Critical Thinking**

In this course, students develop the ability to think clearly and critically. Practice includes developing writing skills that enable students to clearly present claims to support their conclusions and avoid reinforcing biases. Students are given the opportunity to analyze and discuss various types of media-including television, Internet, and print-to determine which sources provide the most reliable information. Topics addressed include the relationship between critical thinking and clear writing, credibility of sources, rhetorical devices, fallacies, unclear or misleading language, and the characteristics of various types of arguments.

GEN 105 ..... 3 credits  
**Skills for Learning in an Information Age**

This course introduces students to learning in an information-rich society. Students will develop strategies for successful distance learning, time management, and for managing the abundance of information available in today's society. Students will also explore the appropriate use of information in an academic environment. Specific topics for the course include computing skills for distance learning, online library use, academic honesty, and the development of effective study skills.

**Bachelor of Science in Information Technology**

*The following Bachelor of Science in Information Technology (BSIT) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Bachelor of Science in Information Technology (BSIT) program is focused on the acquisition of theory and application of technical competencies associated with the information technology profession. The courses prepare students with fundamental knowledge in core technologies, such as systems analysis and design, programming, database design, network architecture and administration, Web technologies and application development, implementation and maintenance.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**A Track Required Introductory Course**

GEN 200 ..... 3 credits  
 Foundations for General Education and Professional Success

**B Track Required Introductory Course**

GEN 195 ..... 3 credits  
 Foundations of University Studies

**BSIT Required Course of Study - A Track and B Track**

CIS 207 ~ ..... 3 credits  
 Information Systems Fundamentals  
 PRG 211 ~ ..... 3 credits  
 Algorithms and Logic for Computer Programming  
 WEB 240 ~ ..... 3 credits  
 Web Design Fundamentals  
 POS 355 ~ ..... 3 credits  
 Introduction to Operating Systems  
 ENG 221 ~ ..... 3 credits  
 Technical Writing Fundamentals  
 BSA 310 ~ ..... 3 credits  
 Business Systems  
 BSA 375 ~ ..... 3 credits  
 Fundamentals of Business Systems Development  
 CMGT 410 ~ ..... 3 credits  
 Project Planning & Implementation  
 DBM 380 ~ ..... 3 credits  
 Database Concepts

CMGT 400 ~ ..... 3 credits  
 Intro to Information Assurance & Security  
 NTC 362 ~ ..... 3 credits  
 Fundamentals of Networking  
 PRG 420 ~ ..... 3 credits  
 Java Programming I  
 MTH 221 ~ ..... 3 credits  
 Discrete Math for IT  
 CMGT 445 ~ ..... 3 credits  
 Application Implementation

**Concentration in Advanced Networking**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-an>.

NTC 405 ~ ..... 3 credits  
 Telecommunications and Networking I  
 NTC 406 ~ ..... 3 credits  
 Telecommunications and Networking II  
 NTC 409 ~ ..... 3 credits  
 Global Network Architecture and Design  
 NTC 411 ~ ..... 3 credits  
 Global Network Management, Support and Security  
 NTC 415 ~ ..... 3 credits  
 Network Integration Project

**Concentration in Business Systems Analysis**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-bsa>.

BSA 400 ~ ..... 3 credits  
 Business Systems Development II  
 BSA 411 ~ ..... 3 credits  
 Systems Analysis Methodologies  
 BSA 412 ~ ..... 3 credits  
 Systems Analysis Tools  
 CMGT 411 ~ ..... 3 credits  
 Project Planning Management  
 CMGT 413 ~ ..... 3 credits  
 Application Acquisition & Sourcing

**Concentration in Information Management**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-im>.

IM 300 ~ ..... 3 credits  
 Data Organization Architecture  
 IM 305 ~ ..... 3 credits  
 Data Modeling  
 POS 410 ~ ..... 3 credits  
 SQL for Business  
 DBM 384 ~ ..... 3 credits  
 Special Purpose Databases  
 DBM 460 ~ ..... 3 credits  
 Enterprise Database Management Systems

**Concentration in Information Systems Security**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-iss>.

POS 420 ~ .....	3 credits
Introduction to UNIX	
POS 421 ~ .....	3 credits
Windows Server Networking	
CMGT 441 ~ .....	3 credits
Introduction to Information Systems Security Management	
CMGT 442 ~ .....	3 credits
Information Systems Risk Management	
CMGT 430 ~ .....	3 credits
Enterprise Security	

**Concentration in Multimedia & Visual Communication**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-mvc>.

VCT 300 ~ .....	3 credits
Image Editing	
VCT 320 ~ .....	3 credits
Electronic Publishing	
VCT 410 ~ .....	3 credits
Instructional Design	
VCT 420 ~ .....	3 credits
Multimedia Development	
WEB 431 ~ .....	3 credits
XML	

**Concentration in Software Engineering**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-se>.

PRG 421 ~ .....	3 credits
Java Programming II	
BSA 385 ~ .....	3 credits
Intro to Software Engineering	
CSS 422 ~ .....	3 credits
Software Architecture	
POS 408 ~ .....	3 credits
.NET I	
POS 409 ~ .....	3 credits
.NET II	

**Concentration in Web Development**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-wd>.

VCT 300 ~ .....	3 credits
Image Editing	
WEB 401 ~ .....	3 credits
Web Development	
WEB 407 ~ .....	3 credits
Advanced Web Development	

WEB 434 ~ .....	3 credits
Website Commercialization I	
WEB 435 ~ .....	3 credits
Website Commercialization II	

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for the BSIT**

All applicants are expected to meet the following admissions requirements:

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- South Carolina: Applicants attending a local campus in South Carolina must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit an Associate Degree posted transcript in lieu of the high school documentation. This may include a copy of a transcript or degree verification information from the institution's student website.
- Nevada: Applicants attending a local campus in Nevada must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit a college transcript which documents high school attended and date of completion or a copy of a DD-214 showing high school graduation or equivalency to satisfy this requirement.
- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.
- Applicants must be currently employed or have access to a work environment.

**Degree Requirements for the BSIT**

- Completion of a minimum of 120 credits that include the following distribution:
  - A minimum of 42 upper division credits.
  - A minimum of 54 credits of the 120 credits must be in the general education areas approved by the University.
- A minimum grade point average (GPA) of 2.0.
- All students must complete the minimum number of credits required by their degree program.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students will declare a concentration at the time of enrollment.

- The diploma awarded for this program will read as: Bachelor of Science in Information Technology and will not reflect the concentration. Concentrations are reflected on the transcript only.

### General Education Requirements for the BSIT

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement 6 credits

(A Track must include COMM 215, equivalent, or higher and COMM 218)

(B Track must include: COM 170 and COM 172)

Puerto Rico students may not use conversational English to satisfy Communication Arts.

Oregon campus students, enrolled in the A Track, must use writing courses to complete the 6 credits of Communication Arts. This does not include Oregon students attending the Online Campus. B Track students will meet this requirement by completing COM 170 and COM 172.

Mathematics Requirement 6 credits

(Must include MTH 220, equivalent, or higher)

Science & Technology Requirement 6 credits

(B Track must include: SCI 163)

Must include at least three (3) credits in the physical or biological sciences

Humanities Requirement 6 credits

(B Track must include: HUM 114)

Social Science Requirement 6 credits

(B Track must include: PSY 211)

Nevada students must complete three (3) credits in Nevada Constitution

Additional Liberal Arts Requirement 6 credits

Puerto Rico students must complete 6 credits of Spanish. Conversational Spanish may not be used. Only Introduction to Spanish, Basic Spanish 1 or higher will satisfy the Spanish requirement.

(A Track Oregon campus students must include COMM 218)

(B Track must include COMM 218)

Interdisciplinary Requirement 18 credits

(B Track must include: FP 120)

(B Track Puerto Rico campus students must include COMM 218)

### General Education Requirements for the BSIT for Arkansas Students

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement(s) 6 credits

(A Track must include: COMM 215, equivalent, or higher and COMM 218)

(B Track must include: COM 170 and COM 172)

Mathematics Requirement(s) 6 credits

Must include MTH 220

Science & Technology Requirement(s) 9 credits

(B Track must include: SCI 163)

Must include CHM 110 and PHY 101 or equivalent transfer coursework with a lab component.

Humanities Requirement(s) 9 credits

(B Track must include: HUM 114)

Social Science Requirement(s) 9 credits

(B Track must include: PSY 211)

Must include HIS 145 or POL 215 or equivalent transfer coursework with US History or Government content.

Additional Liberal Arts Requirement(s) 6 credits

(B Track must include: COMM 218)

Interdisciplinary Requirement(s) 9 credits

(B Track students must include: FP 120)

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

### Academic Progression Requirements for the BSIT

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application will be enrolled in the B Track and are required to complete the First-Year Sequence.
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or concentration courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course. It is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, must take GEN 200 Foundations for General Education and Professional Success as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence (A Track).
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements.
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.

- All undergraduate students must satisfy math and English prerequisites prior to enrolling in any course that requires math or English as a prerequisite.

**Residency Requirements and Course Waivers for the BSIT**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 30 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 30 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past five (5) years (ten years for MTH 221) of application to the University with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

Through an approved articulation agreement, students who have successfully completed equivalent courses may waive, without credits, up to thirty (30) credits of the required course of study. Students must substitute other upper division coursework to satisfy the upper division credit requirement of their degree program.

This policy also applies to upper division courses which are used to fulfill Associate of Arts degree requirements. In order to be granted a waiver, without credit, for a course in the required course of study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or nationally accredited institution with which the University of Phoenix has an approved articulation agreement.
- The course must have been completed with a grade of "C" (2.0) or better during the effective dates of the approved articulation agreement.
- The course must be approved through the articulation agreement and must be comparable in content and credits to the University course it is replacing.

The following courses in the Required Course of Study may not be waived: GEN 195, GEN 200

Students may waive, with or without credit, courses in the Required Course of Study, but must substitute with any upper division coursework to satisfy the required course of study (national testing program credit, prior learning credit, and military credit, or General Education coursework, may not be used to replace coursework waived, with or without credit).

**Course Descriptions for the BSIT**

GEN 200 ..... 3 credits

**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 195 ..... 3 credits

**Foundations of University Studies**

The essential information, skills, tools, and techniques necessary for academic success and personal effectiveness at the University of Phoenix are introduced in this course. The course develops and applies practical knowledge and skills immediately relevant to first-year university students. Course topics include goal setting and working with personal motivation, understanding and using University resources, developing efficient study habits, making the most of personal learning styles, and how best to manage time and reduce personal stress levels.

CIS 207 ..... 3 credits

**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.

PRG 211 ..... 3 credits

**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.

WEB 240 ..... 3 credits

**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 websites with the aid of a software authoring application. Topics include XHTML, CSS, JavaScript®, server hosting, site publication, site maintenance, and search engine optimization.

POS 355 ..... 3 credits

**Introduction to Operating Systems**

This course provides an introduction to operating systems. Topics covered include operating system concepts, program execution, and operating system internals such as memory, processor, device, and file management. A variety of operating systems are compared and contrasted.

ENG 221 ..... 3 credits

**Technical Writing Fundamentals**

This course covers the fundamentals and best practices of using written communication in business and in the information technologies. Topics include strategies, techniques, and nuances for producing emails, memos, reports, proposals, project specifications, and user manuals, as well as other technical documents.

BSA 310 ..... 3 credits

**Business Systems**

This course reviews common business systems and their interrelationships. Business systems covered include finance, accounting, sales, marketing, human resources, legal, and operations. Emphasis is placed upon the inputs and outputs of information systems, the potential for integration of the systems, and information systems security.

BSA 375 ..... 3 credits

**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.

CMGT 410 ..... 3 credits

**Project Planning and 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.

DBM 380 ..... 3 credits

**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.

CMGT 400 ..... 3credits

**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.

NTC 362 ..... 3 credits

**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.

PRG 420 ..... 3 credits

**Java Programming I**

This course introduces object-oriented programming in the content of business applications development. The basics of the Java programming language are covered.

MTH 221 ..... 3 credits

**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.

CMGT 445 ..... 3 credits

**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.

COMM 215 ..... 3 credits

**Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

MTH 220 ..... 3 credits

**College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

MTH 221 ..... 3 credits

**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.

GEN 101 ..... 3 credits

**Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 .....3 credits  
**Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

CHM 110 .....3 credits  
**Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

PHY 101 .....3 credits  
**Fundamentals of Physics**

This course is designed to introduce physics at an entry level by examining the principle laws of physics leading to a conceptual understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and thermodynamics, electricity and magnetism, and waves. Students will apply these principles using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 145 .....3 credits  
**The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying an historical perspective to analyze contemporary issues.

POL 215 .....3 credits  
**State and Local Political Processes**

This course is designed to introduce students to state and local government structures and processes. Government and business relationships are particularly emphasized. Opportunities are provided for students to observe and interact with state and local government officials and groups and to debate public policy issues in a local or state government meeting setting.

**Course Descriptions for the Concentration in Advanced Networking**

NTC 405.....3 credits  
**Telecommunications and Networking I**

This course is designed to provide the fundamentals of basic telecommunications including an introduction to standards, organizations, and governing bodies, and concepts such as TCP/IP, modulation or demodulation, and terminology for telecommunications and computer networks. The basics of analog and digital circuits are analyzed. Complex digital equipment, such as multiplexers, is introduced. The course is completed with an overview and analysis of various network topologies and network operating systems explaining how the electronic concepts assist in network troubleshooting.

NTC 406.....3 credits  
**Telecommunications and Networking II**

NTC 406 provides analysis of the seven levels of the OSI model as the basis for analysis and discussion of network protocols. Each level of the OSI model is analyzed in detail with the related theory being applied to specific applications in the industry.

NTC 409.....3 credits  
**Global Network Architecture and Design**

This course addresses the fundamentals of network design and analysis with an emphasis on network traffic. The network design techniques necessary for LAN and WAN implementations are covered. The concept of service levels, the provisioning of and importance of service levels are analyzed.

NTC 411.....3 credits  
**Global Network Management, Support and Security**

NTC 411 broadens network design and analysis to include global considerations for an enterprise network configuration. This course introduces the topic of overall end-to-end network management, the concepts and the available tools to the network designer. The development and management of the relationships between the enterprise and the WAN providers is discussed. Network security, Disaster Recovery, and Business Continuity planner is also addressed in this course.

NTC 415.....3 credits  
**Network Integration Project**

The focus of this course is the application of network design and performance concepts. The design considerations for a global network, including LANs and WANs with both wired and wireless functionality will be applied. End-to-end performance criteria and service levels guarantees will be examined as a part of network design project. Network capabilities to handle varying types of traffic from low speed data to large image files and streaming video and digital voice will be explored.

**Course Descriptions for the Concentration in Business Systems Analysis**

BSA 400 ..... 3 credits

**Business Systems Development II**

This course continues the subject matter of BSA/375, Fundamentals of Business Systems Development. It completes an examination of methodologies, tools, and standards used in business systems development. An emphasis is placed on examining enterprise-level business systems.

BSA 411 ..... 3 credits

**Systems Analysis Methodologies**

This course provides the student with an understanding of several methodologies available to identify business problems and the possible information system solutions for addressing problems.

BSA 412 ..... 3 credits

**Systems Analysis Tools**

This course builds upon the methodologies examined in Systems Analysis Methodologies by providing an emphasis on analysis tools – computer and non-computer supported. Emphasis is placed on when and how Microsoft Visio may be used for analysis.

CMGT 411 ..... 3 credits

**Project Planning Management**

This course provides the foundation for understanding the broad concepts of successful planning, organization, and implementation within the realm of information technology. This course uses real-world examples and identifies common mistakes and pitfalls in project management. Topics covered include project scoping, estimating, budgeting, scheduling, tracking, and controlling.

CMGT 413 ..... 3 credits

**Application Acquisition and Sourcing**

This course examines a number of alternatives to be considered when delivery of an information technology application is needed. The evaluation of alternatives such as build versus buy and insourcing or outsourcing are covered along with the considerations for testing and evaluation of information technology decisions. The primary components of a Request for Proposal (RFP) and a Statement of Work (SOW) are examined in this course.

**Course Descriptions for the Concentration in Information Management**

IM 300 ..... 3 credits

**Data Organization Architecture**

This course provides an introduction to how data is architected and organized. It discusses the different data models used to store data, outlines several schemas that drive how data is structured, and provides other database concepts relating to the design and architecture of data.

IM 305 ..... 3 credits

**Data Modeling**

This course provides an in-depth look at several intermediate design and architecture concepts. The course covers the design method used in the creation of a relational database, the required steps to reengineer a database, and several tools and techniques used through the database design process.

POS 410 ..... 3 credits

**SQL For Business**

This course covers Structured Query Language (SQL) that provides a unified language that lets you query, manipulate, or control data in a business applications environment.

DBM 384 ..... 3 credits

**Special Purpose Databases**

This course examines the use of database technology in a variety of information technology applications. The use of text, multimedia, temporal, spatial, and mobile databases will be covered in this course.

DBM 460 ..... 3 credits

**Enterprise Database Management Systems**

This course covers distributed computing, middleware and industry standards as relating to the enterprise data repository. Data warehousing, data mining, and data marts are covered from an enterprise perspective.

**Course Descriptions for the Concentration in Information Systems Security**

POS 420 ..... 3 credits

**Introduction to UNIX**

This course is a survey of the UNIX® operations. The student will gain an understanding of the internal operations of the UNIX® system, which enables the user to make efficient use of files, file systems, and processes. Commands for efficient management of UNIX® system files, file systems and process, systems administration and security are also examined.

POS 421 ..... 3 credits

**Windows Server Networking**

This course is a survey of Windows Server Administration. Topics emphasize the structure and the various applications supported by Windows Server. The course includes remote, hands-on access to Windows lab exercises.

CMGT 441 ..... 3 credits

**Introduction to Information Systems Security Management**

This course introduces security principles and management issues that IT professionals must consider. The course surveys current and emerging security practices and processes as they relate to; information systems, systems development, operating systems and programming, database development and management, networking and telecommunications, and the Internet.

CMGT 442 ..... 3 credits

**Information Systems Risk Management**

This course identifies and defines the types of risks that information systems professionals need to consider during the development and implementation of computer based information systems. This course will survey remedies and prevention techniques available to address the risk areas present. Organizational policies and current regulatory considerations will also be examined relative to development, implementation and use of computer based information systems.

CMGT 430 ..... 3 credits

**Enterprise Security**

This course covers the managerial and technical considerations related to access controls, authentication, external attacks and other risk areas facing the enterprise. This course will also survey the techniques to prevent unauthorized computer and facility access as well the concepts for protecting the hardware and software assets of the enterprise.

**Course Descriptions for the Concentration in Multimedia & Visual Communication**

VCT 300 ..... 3 credits

**Image Editing**

This course is an introduction to image editing and its role in the disciplines of web design, electronic publishing and multimedia development. An overview is presented on file formats, composition, color, text design, retouching and manipulation of graphic and photographic images.

VCT 320 ..... 3 credits

**Electronic Publishing**

This course presents the essential role of electronic publishing in the delivery of information to today's businesses and consumers. Most of the course is concerned with methods and techniques involved in the electronic publishing of business presentations, corporate reports, newsletters, training materials, manuals and electronic books, but other information formats such as wikis and blogs are also considered.

VCT 410 ..... 3 credits

**Instructional Design**

This course presents principles of instructional design. An instructional design methodology is presented that includes requirements analysis, performance objectives, performance measures, instructional strategies, storyboarding, design specifications, development, implementation and evaluation.

VCT 420 ..... 3 credits

**Multimedia Development**

This course introduces the fundamentals of developing interactive, multimedia enriched content for delivery across alternative platforms such as the Internet, CDs and handheld devices. The focus is on the integration of animation, audio and video content to maximize communication.

WEB 431 ..... 3 credits

**XML**

This course extends Web programming to include XML. An emphasis is placed upon the appropriate use of XML as a programming tool.

**Course Descriptions for the Concentration in Software Engineering**

PRG 421 ..... 3 credits

**Java Programming II**

This course continues the subject in PRG 420, Java Programming I. Topics include designing complex applications and the use of date files.

BSA 385 ..... 3 credits

**Intro to Software Engineering**

This course introduces the fundamental, logical, and design considerations addressed during system and application software development. It provides a background in applications software development and testing techniques through a combination of theory and application.

CSS 422 ..... 3 credits

**Software Architecture**

This course is an integrating course in business application software engineering. Integration, migration, and maintenance of enterprise software systems, including legacy systems, are emphasized.

POS 408 ..... 3 credits  
**.NET I**

This course introduces object-oriented programming in the context of business applications development. It develops the skills and knowledge necessary to produce beginning event-driven programs with graphical user interfaces (GUI). Topics include standard Windows compatible forms, controls, and procedures. The course uses Visual Basic.

POS 409 ..... 3 credits  
**.NET II**

This course extends the facilities and command sets of the Visual Basic programming system for Windows®. Topics covered include designing Visual Basic applications, forms, event driven procedures, writing and debugging programs, databases, data files, and printing.

**Course Descriptions for the Concentration in Web Development**

VCT 300 ..... 3 credits

**Image Editing**

This course is an introduction to image editing and its role in the disciplines of web design, electronic publishing and multimedia development. An overview is presented on file formats, composition, color, text design, retouching and manipulation of graphic and photographic images.

WEB 401 ..... 3 credits

**Web Development**

This course covers topics such as designing dynamic web pages and an introduction to Java and Java applets. Emphasis is placed upon the appropriate use of web programming tools.

WEB 407 ..... 3 credits

**Advanced Web Development**

This course focuses on existing and emerging Web development technologies. Topics include specialized Web markup languages, server-side backend databases, server-side programming, web services, enterprise Web development and Web applications.

WEB 431 ..... 3 credits

**XML**

This course extends Web programming to include XML. An emphasis is placed upon the appropriate use of XML as a programming tool.

WEB 434 ..... 3 credits

**Website Commercialization I**

This course builds upon a professional understanding of web design and development, emphasizing the trend towards website commercialization. Topics of this course include web-based interfaces, online supply chain management, eCommerce tools and techniques, branding, basic marketing strategies and Search Engine Optimization.

WEB 435 ..... 3 credits

**Website Commercialization II**

This course explores the concept of website commercialization from the perspective of an advanced web developer. Students will focus on client security and server security, social networks, virtual worlds, m-commerce, non-traditional marketing strategies and customer service.

**Bachelor of Science in Information Technology (Maryland-Online)**

*The following Bachelor of Science in Information Technology (BSIT) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Bachelor of Science in Information Technology (BSIT) program is focused on the acquisition of theory and application of technical competencies associated with the information technology profession. The courses prepare students with fundamental knowledge in core technologies, such as systems analysis and design, programming, database design, network architecture and administration, Web technologies and application development, implementation and maintenance.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**A Track Required Introductory Course**

GEN 200 ..... 3 credits  
Foundations for General Education and Professional Success

**B Track Required Introductory Course**

GEN 195 ..... 3 credits  
Foundations of University Studies

**BSIT Required Course of Study - A Track and B Track**

CIS 207 ~ ..... 3 credits  
Information Systems Fundamentals  
PRG 211 ~ ..... 3 credits  
Algorithms and Logic for Computer Programming  
WEB 240 ~ ..... 3 credits  
Web Design Fundamentals  
POS 355 ~ ..... 3 credits  
Introduction to Operating Systems  
ENG 221 ~ ..... 3 credits  
Technical Writing Fundamentals  
BSA 310 ~ ..... 3 credits  
Business Systems  
BSA 375 ~ ..... 3 credits  
Fundamentals of Business Systems Development  
CMGT 410 ~ ..... 3 credits  
Project Planning & Implementation  
DBM 380 ~ ..... 3 credits  
Database Concepts  
CMGT 400 ~ ..... 3 credits  
Intro to Information Assurance & Security  
NTC 362 ~ ..... 3 credits  
Fundamentals of Networking  
PRG 420 ~ ..... 3 credits  
Java Programming I  
MTH 221 ~ ..... 3 credits  
Discrete Math for IT

CMGT 445 ~ ..... 3 credits  
Application Implementation

**Emphasis in Advanced Networking**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-an>.

NTC 405 ~ ..... 3 credits  
Telecommunications and Networking I  
NTC 406 ~ ..... 3 credits  
Telecommunications and Networking II  
NTC 409 ~ ..... 3 credits  
Global Network Architecture and Design  
NTC 411 ~ ..... 3 credits  
Global Network Management, Support and Security  
NTC 415 ~ ..... 3 credits  
Network Integration Project

**Emphasis in Business Systems Analysis**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-bsa>.

BSA 400 ..... 3 credits  
Business Systems Development II  
BSA 411~ ..... 3 credits  
Systems Analysis Methodologies  
BSA 412 ~ ..... 3 credits  
Systems Analysis Tools  
CMGT 411~ ..... 3 credits  
Project Planning Management  
CMGT 413 ~ ..... 3 credits  
Application Acquisition & Sourcing

**Emphasis in Information Management**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-im>.

IM 300~ ..... 3 credits  
Data Organization Architecture  
IM 305 ~ ..... 3 credits  
Data Modeling  
POS 410 ~ ..... 3 credits  
SQL for Business  
DBM 384 ~ ..... 3 credits  
Special Purpose Databases  
DBM 460 ~ ..... 3 credits  
Enterprise Database Management Systems

**Emphasis in Information Systems Security**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-iss>.

POS 420 ~ .....	3 credits
Introduction to UNIX	
POS 421 ~ .....	3 credits
Windows Server Networking	
CMGT 441 ~ .....	3 credits
Introduction to Information Systems Security Management	
CMGT 442 ~ .....	3 credits
Information Systems Risk Management	
CMGT 430 ~ .....	3 credits
Enterprise Security	

**Emphasis in Multimedia & Visual Communication**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-mvc>.

VCT 300 ~ .....	3 credits
Image Editing	
VCT 320 ~ .....	3 credits
Electronic Publishing	
VCT 410 ~ .....	3 credits
Instructional Design	
VCT 420 ~ .....	3 credits
Multimedia Development	
WEB 431 ~ .....	3 credits
XML	

**Emphasis in Software Engineering**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-se>.

PRG 421 ~ .....	3 credits
Java Programming II	
BSA 385 ~ .....	3 credits
Intro to Software Engineering	
CSS 422 ~ .....	3 credits
Software Architecture	
POS 408 ~ .....	3 credits
.NET I	
POS 409 ~ .....	3 credits
.NET II	

**Emphasis in Web Development**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsit-wd>.

VCT 300 ~ .....	3 credits
Image Editing	
WEB 401 ~ .....	3 credits
Web Development	
WEB 407 ~ .....	3 credits
Advanced Web Development	

WEB 434 ~ .....	3 credits
Website Commercialization I	
WEB 435 ~ .....	3 credits
Website Commercialization II	

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for the BSIT**

All applicants are expected to meet the following admissions requirements:

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- Applicants must be currently employed or have access to a work environment.

**Degree Requirements for the BSIT**

- Completion of a minimum of 120 credits that include the following distribution:
  - A minimum of 42 upper division credits.
  - A minimum of 54 credits of the 120 credits must be in the general education areas approved by the University.
- A minimum grade point average (GPA) of 2.0.
- All students must complete the minimum number of credits required by their degree program.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- Students will declare an emphasis at the time of enrollment.
- The diploma awarded for this program will read as: Bachelor of Science in Information Technology and will not reflect the emphasis. Emphases are reflected on the transcript only.

**General Education Requirements for the BSIT**

A minimum of 54 of the 120 credits must be in the general education areas approved by the University.

Communication Arts Requirement 6 credits

(A Track must include COMM 215, equivalent, or higher and COMM 218)

(B Track must include: COM 170 and COM 172)

Mathematics Requirement 6 credits

(Must include MTH 220, equivalent, or higher)

Science & Technology Requirement 6 credits

(B Track must include: SCI 163)

Must include at least three (3) credits in the physical or biological sciences

Humanities Requirement 6 credits

(B Track must include: HUM 114)

Social Science Requirement 6 credits

(B Track must include: PSY 211)

Additional Liberal Arts Requirement 6 credits

(B Track must include COMM 218)

Interdisciplinary Requirement 18 credits

(B Track must include: FP 120)

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

#### Academic Progression Requirements for the BSIT

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application will be enrolled in the B Track and are required to complete the First-Year Sequence.
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or emphasis courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course it is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, must take GEN 200 Foundations for General Education and Professional Success as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence (A Track).
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements.
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.
- All undergraduate students must satisfy math and English prerequisites prior to enrolling in any course that requires math or English as a prerequisite.

#### Residency Requirements and Course Waivers for the BSIT

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 30 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 30 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past five (5) years (ten years for MTH 221) of application to the University with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

Through an approved articulation agreement, students who have successfully completed equivalent courses may waive, without credits, up to thirty (30) credits of the required course of study. Students must substitute other upper division coursework to satisfy the upper division credit requirement of their degree program.

This policy also applies to upper division courses which are used to fulfill Associate of Arts degree requirements. In order to be granted a waiver, without credit, for a course in the required course of study, a student must have completed a previous course which meets the following criteria:

- The course must have been completed and transcribed from a regionally or nationally accredited institution with which the University of Phoenix has an approved articulation agreement.
- The course must have been completed with a grade of "C" (2.0) or better during the effective dates of the approved articulation agreement.
- The course must be approved through the articulation agreement and must be comparable in content and credits to the University course it is replacing.

The following courses in the Required Course of Study may not be waived: GEN 195, GEN 200

Students may waive, with or without credit, courses in the Required Course of Study, but must substitute with any upper division coursework to satisfy the required course of study (national testing program credit, prior learning credit, and military credit, or General Education coursework, may not be used to replace coursework waived, with or without credit).

**Course Descriptions for the BSIT**

GEN 200 .....3 credits

**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 195 .....3 credits

**Foundations of University Studies**

The essential information, skills, tools, and techniques necessary for academic success and personal effectiveness at the University of Phoenix are introduced in this course. The course develops and applies practical knowledge and skills immediately relevant to first-year university students. Course topics include goal setting and working with personal motivation, understanding and using University resources, developing efficient study habits, making the most of personal learning styles, and how best to manage time and reduce personal stress levels.

CIS 207 .....3 credits

**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.

PRG 211 .....3 credits

**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.

WEB 240 .....3 credits

**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 websites with the aid of a software authoring application. Topics include XHTML, CSS, JavaScript®, server hosting, site publication, site maintenance, and search engine optimization.

POS 355.....3 credits

**Introduction to Operating Systems**

This course provides an introduction to operating systems. Topics covered include operating system concepts, program execution, and operating system internals such as memory, processor, device, and file management. A variety of operating systems are compared and contrasted.

ENG 221 .....3 credits

**Technical Writing Fundamentals**

This course covers the fundamentals and best practices of using written communication in business and in the information technologies. Topics include strategies, techniques, and nuances for producing emails, memos, reports, proposals, project specifications, and user manuals, as well as other technical documents.

BSA 310 .....3 credits

**Business Systems**

This course reviews common business systems and their interrelationships. Business systems covered include finance, accounting, sales, marketing, human resources, legal, and operations. Emphasis is placed upon the inputs and outputs of information systems, the potential for integration of the systems, and information systems security.

BSA 375 .....3 credits

**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.

CMGT 410 .....3 credits

**Project Planning and 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.

DBM 380 .....3 credits

**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.

CMGT 400 .....3credits

**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.

NTC 362.....3 credits

**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.

PRG 420 .....3 credits

**Java Programming I**

This course introduces object-oriented programming in the content of business applications development. The basics of the Java programming language are covered.

MTH 221 ..... 3 credits

#### **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.

CMGT 445 ..... 3 credits

#### **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.

COMM 215 ..... 3 credits

#### **Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

MTH 220 ..... 3 credits

#### **College Algebra**

This course presents traditional concepts in college algebra. Topics include linear, polynomial, rational, radical, exponential and logarithmic functions, systems of equations, sequences, series, and probability.

MTH 221 ..... 3 credits

#### **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.

GEN 101 ..... 3 credits

#### **Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 ..... 3 credits

#### **Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

CHM 110 ..... 3 credits

#### **Introductory Chemistry**

This course will examine the basic principles of chemistry conceptually and specifically. The course will apply chemical concepts to address relevant issues ranging from atomic structure and chemical reactions to organic and biological chemistry. The course topics include matter and energy, chemical bonding, intermolecular forces, chemical equilibrium, and nuclear, organic, and biological chemistry. Students will apply these concepts using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

PHY 101 ..... 3 credits

#### **Fundamentals of Physics**

This course is designed to introduce physics at an entry level by examining the principle laws of physics leading to a conceptual understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and thermodynamics, electricity and magnetism, and waves. Students will apply these principles using practical examples, facilitated discussions, and experiments conducted through a virtual laboratory.

HIS 145 ..... 3 credits

#### **The American Experience Since 1945**

This course is an overview of the principal social, political, economic, and global events which have shaped the American experience since World War II. Understanding modern American history is a necessity in today's ever-changing world. This course aims to supply the tools for understanding current political, social, cultural, and economic problems in the U.S. by applying an historical perspective to analyze contemporary issues.

POL 215 ..... 3 credits

#### **State and Local Political Processes**

This course is designed to introduce students to state and local government structures and processes. Government and business relationships are particularly emphasized. Opportunities are provided for students to observe and interact with state and local government officials and groups and to debate public policy issues in a local or state government meeting setting.

**Course Descriptions for the Emphasis in Advanced Networking**

NTC 405..... 3 credits

**Telecommunications and Networking I**

This course is designed to provide the fundamentals of basic telecommunications including an introduction to standards, organizations, and governing bodies, and concepts such as TCP/IP, modulation or demodulation, and terminology for telecommunications and computer networks. The basics of analog and digital circuits are analyzed. Complex digital equipment, such as multiplexers, is introduced. The course is completed with an overview and analysis of various network topologies and network operating systems explaining how the electronic concepts assist in network troubleshooting.

NTC 406..... 3 credits

**Telecommunications and Networking II**

NTC 406 provides analysis of the seven levels of the OSI model as the basis for analysis and discussion of network protocols. Each level of the OSI model is analyzed in detail with the related theory being applied to specific applications in the industry.

NTC 409..... 3 credits

**Global Network Architecture and Design**

This course addresses the fundamentals of network design and analysis with an emphasis on network traffic. The network design techniques necessary for LAN and WAN implementations are covered. The concept of service levels, the provisioning of and importance of service levels are analyzed.

NTC 411..... 3 credits

**Global Network Management, Support and Security**

NTC 411 broadens network design and analysis to include global considerations for an enterprise network configuration. This course introduces the topic of overall end-to-end network management, the concepts and the available tools to the network designer. The development and management of the relationships between the enterprise and the WAN providers is discussed. Network security, Disaster Recovery, and Business Continuity planner is also addressed in this course.

NTC 415..... 3 credits

**Network Integration Project**

The focus of this course is the application of network design and performance concepts. The design considerations for a global network, including LANs and WANs with both wired and wireless functionality will be applied. End-to-end performance criteria and service levels guarantees will be examined as a part of network design project. Network capabilities to handle varying types of traffic from low speed data to large image files and streaming video and digital voice will be explored.

**Course Descriptions for the Emphasis in Business Systems Analysis**

BSA 400..... 3 credits

**Business Systems Development II**

This course continues the subject matter of BSA/375, Fundamentals of Business Systems Development. It completes an examination of methodologies, tools, and standards used in business systems development. An emphasis is placed on examining enterprise-level business systems.

BSA 411..... 3 credits

**Systems Analysis Methodologies**

This course provides the student with an understanding of several methodologies available to identify business problems and the possible information system solutions for addressing problems.

BSA 412 ..... 3 credits

**Systems Analysis Tools**

This course builds upon the methodologies examined in Systems Analysis Methodologies by providing an emphasis on analysis tools – computer and non-computer supported. Emphasis is placed on when and how Microsoft Visio may be used for analysis.

CMGT 411 ..... 3 credits

**Project Planning Management**

This course provides the foundation for understanding the broad concepts of successful planning, organization, and implementation within the realm of information technology. This course uses real-world examples and identifies common mistakes and pitfalls in project management. Topics covered include project scoping, estimating, budgeting, scheduling, tracking, and controlling.

CMGT 413 ..... 3 credits

**Application Acquisition and Sourcing**

This course examines a number of alternatives to be considered when delivery of an information technology application is needed. The evaluation of alternatives such as build versus buy and insourcing or outsourcing are covered along with the considerations for testing and evaluation of information technology decisions. The primary components of a Request for Proposal (RFP) and a Statement of Work (SOW) are examined in this course.

**Course Descriptions for the Emphasis in Information Management**

IM 300..... 3 credits

**Data Organization Architecture**

This course provides an introduction to how data is architected and organized. It discusses the different data models used to store data, outlines several schemas that drive how data is structured, and provides other database concepts relating to the design and architecture of data.

IM 305..... 3 credits

**Data Modeling**

This course provides an in-depth look at several intermediate design and architecture concepts. The course covers the design method used in the creation of a relational database, the required steps to reengineer a database, and several tools and techniques used through the database design process.

POS 410 ..... 3 credits

**SQL For Business**

This course covers Structured Query Language (SQL) that provides a unified language that lets you query, manipulate, or control data in a business applications environment.

DBM 384 ..... 3 credits

**Special Purpose Databases**

This course examines the use of database technology in a variety of information technology applications. The use of text, multimedia, temporal, spatial, and mobile databases will be covered in this course.

DBM 460 ..... 3 credits  
**Enterprise Database Management Systems**

This course covers distributed computing, middleware and industry standards as relating to the enterprise data repository. Data warehousing, data mining, and data marts are covered from an enterprise perspective.

**Course Descriptions for the Emphasis in Information Systems Security**

POS 420 ..... 3 credits

**Introduction to UNIX**

This course is a survey of the UNIX® operations. The student will gain an understanding of the internal operations of the UNIX® system, which enables the user to make efficient use of files, file systems, and processes. Commands for efficient management of UNIX® system files, file systems and process, systems administration and security are also examined.

POS 421 ..... 3 credits

**Windows Server Networking**

This course is a survey of Windows Server Administration. Topics emphasize the structure and the various applications supported by Windows Server. The course includes remote, hands-on access to Windows lab exercises.

CMGT 441 ..... 3 credits

**Introduction to Information Systems Security Management**

This course introduces security principles and management issues that IT professionals must consider. The course surveys current and emerging security practices and processes as they relate to; information systems, systems development, operating systems and programming, database development and management, networking and telecommunications, and the Internet.

CMGT 442 ..... 3 credits

**Information Systems Risk Management**

This course identifies and defines the types of risks that information systems professionals need to consider during the development and implementation of computer based information systems. This course will survey remedies and prevention techniques available to address the risk areas present. Organizational policies and current regulatory considerations will also be examined relative to development, implementation and use of computer based information systems.

CMGT 430 ..... 3 credits

**Enterprise Security**

This course covers the managerial and technical considerations related to access controls, authentication, external attacks and other risk areas facing the enterprise. This course will also survey the techniques to prevent unauthorized computer and facility access as well the concepts for protecting the hardware and software assets of the enterprise.

**Course Descriptions for the Emphasis in Multimedia & Visual Communication**

VCT 300 ..... 3 credits

**Image Editing**

This course is an introduction to image editing and its role in the disciplines of web design, electronic publishing and multimedia development. An overview is presented on file formats, composition, color, text design, retouching and manipulation of graphic and photographic images.

VCT 320 ..... 3 credits

**Electronic Publishing**

This course presents the essential role of electronic publishing in the delivery of information to today's businesses and consumers. Most of the course is concerned with methods and techniques involved in the electronic publishing of business presentations, corporate reports, newsletters, training materials, manuals and electronic books, but other information formats such as wikis and blogs are also considered.

VCT 410 ..... 3 credits

**Instructional Design**

This course presents principles of instructional design. An instructional design methodology is presented that includes requirements analysis, performance objectives, performance measures, instructional strategies, storyboarding, design specifications, development, implementation and evaluation.

VCT 420 ..... 3 credits

**Multimedia Development**

This course introduces the fundamentals of developing interactive, multimedia enriched content for delivery across alternative platforms such as the Internet, CDs and handheld devices. The focus is on the integration of animation, audio and video content to maximize communication.

WEB 431 ..... 3 credits

**XML**

This course extends Web programming to include XML. An emphasis is placed upon the appropriate use of XML as a programming tool.

**Course Descriptions for the Emphasis in Software Engineering**

PRG 421 ..... 3 credits

**Java Programming II**

This course continues the subject in PRG 420, Java Programming I. Topics include designing complex applications and the use of date files.

BSA 385 ..... 3 credits

**Intro to Software Engineering**

This course introduces the fundamental, logical, and design considerations addressed during system and application software development. It provides a background in applications software development and testing techniques through a combination of theory and application.

CSS 422 ..... 3 credits

**Software Architecture**

This course is an integrating course in business application software engineering. Integration, migration, and maintenance of enterprise software systems, including legacy systems, are emphasized.

POS 408.....3 credits  
**.NET I**

This course introduces object-oriented programming in the context of business applications development. It develops the skills and knowledge necessary to produce beginning event-driven programs with graphical user interfaces (GUI). Topics include standard Windows compatible forms, controls, and procedures. The course uses Visual Basic.

POS 409.....3 credits  
**.NET II**

This course extends the facilities and command sets of the Visual Basic programming system for Windows®. Topics covered include designing Visual Basic applications, forms, event driven procedures, writing and debugging programs, databases, data files, and printing.

**Course Descriptions for the Emphasis in Web Development**

VCT 300.....3 credits  
**Image Editing**

This course is an introduction to image editing and its role in the disciplines of web design, electronic publishing and multimedia development. An overview is presented on file formats, composition, color, text design, retouching and manipulation of graphic and photographic images.

WEB 401 .....3 credits  
**Web Development**

This course covers topics such as designing dynamic web pages and an introduction to Java and Java applets. Emphasis is placed upon the appropriate use of web programming tools.

WEB 407 .....3 credits

**Advanced Web Development**

This course focuses on existing and emerging Web development technologies. Topics include specialized Web markup languages, server-side backend databases, server-side programming, web services, enterprise Web development and Web applications.

WEB 431 .....3 credits

**XML**

This course extends Web programming to include XML. An emphasis is placed upon the appropriate use of XML as a programming tool.

WEB 434 .....3 credits

**Website Commercialization I**

This course builds upon a professional understanding of web design and development, emphasizing the trend towards website commercialization. Topics of this course include web-based interfaces, online supply chain management, eCommerce tools and techniques, branding, basic marketing strategies and Search Engine Optimization.

WEB 435 .....3 credits

**Website Commercialization II**

This course explores the concept of website commercialization from the perspective of an advanced web developer. Students will focus on client security and server security, social networks, virtual worlds, m-commerce, non-traditional marketing strategies and customer service.

**Associate of Arts in Information Technology/Cisco Networking (Maryland-Online)**

*The following Associate of Arts in Information Technology/Cisco Networking (AAIT/CCNA) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and emphases depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts in Information Technology with an emphasis in Cisco Networking offers coursework designed to help students acquire the knowledge to install, configure and operate Local Area Network (LAN), Wide Area Network (WAN) as well as routing and switching implementations and management. This degree program covers the body of knowledge for the Cisco® Certified Network Associate (CCNA®) exam in preparing the student to install and configure Cisco® switches and routers in multiprotocol inter-networks using LAN and WAN interfaces.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Preferred Sequence and Requirements - A Track and B Track**

CIS 207 ~ .....3 credits

Information Systems Fundamentals

CMGT 245~.....3 credits

IS Security Concepts

CIT 245 ~ .....3 credits

Local Area Networking Fundamentals

CIT 249 ~ .....3 credits

Wide Area Network Environment

CIT 274 ~ .....3 credits

Routing and Switching Implementations

CIT 276 ~ .....3 credits

Routing and Switching Management

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for the AAIT/CCNA**

All applicants are expected to meet the following admissions requirements:

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.

**Degree Requirements for the AAIT/CCNA**

- Completion of a minimum of 60 credits.
- A minimum grade point average (GPA) of 2.0.
- All students must complete the minimum number of credits required by their degree program.
- All undergraduate students are required to complete the minimum general education credits required by their program version.

- The diploma awarded for this program will read as follows:  
Associate of Arts

#### General Education Requirements for the AAIT/CCNA

The General Education requirements for this program are the following:

Communication Arts Requirement 6 credits

(A Track must include: COMM 215, equivalent, or higher and COMM 218)

(B Track must include: COM 170 and COM 172)

Mathematics Requirement 6 credits

(Must include MTH 209, equivalent, or higher)

Science & Technology Requirement 6 credits

(B Track must include: SCI 163)

Humanities Requirement 6 credits

(B Track must include: HUM 114)

Social Science Requirement 6 credits

(B Track must include: PSY 211)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 200)

(B Track must include: GEN 195)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 120 and COMM 218)

All undergraduate students are required to complete the minimum general education credits required by their program version.

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

#### Academic Progression Requirements for the AAIT/CCNA

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application will be enrolled in the B Track and are required to complete the First-Year Sequence.
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or emphasis courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course. It is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.

- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 200 Foundations for General Education and Professional Success as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements. (e.g., taking COM 172 instead of COMM 215)
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.

#### Residency Requirements and Course Waivers for the AAIT/CCNA

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past five years from current program enrollment agreement sign date with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

The following courses in the required course of study may not be waived: GEN 200, GEN 195.

**Course Descriptions for the AAIT/CCNA**

CIS 207 .....3 credits

**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.

CMGT 245 .....3 credits

**IS Security Concepts**

This course introduces general concepts of information systems security. Content includes governmental views, positions and processes of national security. Coursework explores other concepts, including contingency and business resumption planning, backup schemes and implementation strategies, as well as various types of invasive actions and prevention measures.

CIT 245 .....3 credits

**Local Area Networking Fundamentals**

This course addresses the fundamentals of local area networking (LAN). Students will learn about Ethernet LANs, wireless LANs (WLAN), and LAN connections. This will include securing the network, transmission control protocol / internet protocol (TCP/IP), troubleshooting switches, WLAN security, and constructing a network address scheme.

CIT 249 .....3 credits

**Wide Area Network Environment**

This course provides students with the knowledge and skills necessary to implement and support a small to medium size network using wide area networking technologies. This course covers wide area networks (WAN) connections, network environment management, small network implementation, and medium sized switched network construction. It includes enabling the internet connection, router startup and configuration, and securing the expanded network.

CIT 274 .....3 credits

**Routing and Switching Implementations**

This course provides students with the knowledge and skills necessary to design, build, and maintain routing and switching technologies. Instruction covers constructing medium-sized routed networks, implementing Single-Area Open Shortest Path First (OSPF) routing protocol, Enhanced Interior Gateway Routing Protocol (EIGRP), and applying Access Control Lists (ACLs). It includes a review of routing operations and implementing Variable Length Subnet Masking (VLSM).

CIT 276 .....3 credits

**Routing and Switching Management**

This course provides the knowledge and skills necessary for routing and switching management. The course covers address space management and local area network (LAN) extension into a wide area network (WAN). This includes network address translation (NAT) and port address translation (PAT), virtual private network (VPN) solutions and frame relay connectivity.

COMM 215 .....3 credits

**Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

COM 170 .....3 credits

**Elements of University Composition and Communication I**

This course addresses the key elements necessary for effective academic writing in college. The course begins with focus on pre-writing strategies and builds to drafting and revising essays. In addition, the course includes skill development at the sentence and paragraph level.

COM 172 .....3 credits

**Elements of University Composition and Communication II**

This course builds upon the foundations established in Com155. It addresses the various rhetorical modes necessary for effective college essays: narration, illustration, description, process analysis, classification, definition, comparison and contrast, cause and effect, and argumentation. In addition, requirements for research essays, including the use of outside sources and appropriate formatting, are considered.

MTH 209 .....3 credits

**College Mathematics II**

This course continues the demonstration and examination of various basic algebra concepts that was begun in MTH 208: College Mathematics I. It assists in building skills for performing more complex mathematical operations and problem solving than in earlier courses. These concepts and skills should serve as a foundation for subsequent quantitative business coursework. Applications to real-world problems are emphasized throughout the course. Specific applications to disciplines such as statistics, accounting, finance, and economics are demonstrated and discussed. A variety of other applications, such as geometry, personal finance, science, and engineering, are also demonstrated and discussed.

SCI 163 .....3 credits

**Elements of Health and Wellness**

This course reinforces the concept that learning effectively and living well involves both the mind and body. It presents the fundamentals of wellness and preventive health including strategic planning to attain and maintain personal optimal health. In addition, physical and mental diseases are discussed along with the dangers of environmental pollution, stress, addiction, and other negative factors that can affect personal health.

HUM 114 .....3 credits

**Critical Thinking and Creative Problem Solving**

This course focuses on developing the critical and creative thinking skills necessary to analyze and solve problems, make decisions, implement strategies, and formulate well supported points of view on key academic, social, and professional issues. The principles of creative thinking are essential to critical thinking skills. Students will learn how to evaluate their ideas and how to communicate their points of view persuasively.

PSY 211 ..... 3 credits  
**Essentials of Psychology**

This course overviews the foundations of psychology as the field applies to everyday life. The physical and mental aspects of psychology are traced through lifespan development with emphasis on psychological health and wellness. Further study focuses on personality; thinking, learning and memory; motivation and emotions; and gender and sexuality. Based in various historical traditions, the course is set in the context of contemporary psychological principles.

GEN 200 ..... 3 credits  
**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 195 ..... 3 credits  
**Foundations of University Studies**

The essential information, skills, tools, and techniques necessary for academic success and personal effectiveness at the University of Phoenix are introduced in this course. The course develops and applies practical knowledge and skills immediately relevant to first-year university students. Course topics include goal setting and working with personal motivation, understanding and using University resources, developing efficient study habits, making the most of personal learning styles, and how best to manage time and reduce personal stress levels.

FP 120 ..... 3 credits  
**Essentials of Personal Finance**

This course provides an overview of the elements necessary for effective personal financial planning and the opportunity to apply the techniques and strategies essential to this understanding. Primary areas of study include creating and managing a personal budget, understanding and paying taxes, working with financial institutions, wise use of credit cards and consumer loans, financing automobiles and homes, and the use of insurance for protecting one's family and property.

GEN 101 ..... 3 credits  
**Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 ..... 3 credits  
**Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

**Associate of Arts in Information Technology/Cisco Networking**

*The following Associate of Arts in Information Technology/Cisco Networking (AAIT/CCNA) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Associate of Arts in Information Technology with a concentration in Cisco Networking offers coursework designed to help students acquire the knowledge to install, configure and operate Local Area Network (LAN), Wide Area Network (WAN) as well as routing and switching implementations and management. This degree program covers the body of knowledge for the Cisco® Certified Network Associate (CCNA®) exam in preparing the student to install and configure Cisco® switches and routers in multiprotocol internetworks using LAN and WAN interfaces.

Courses requiring prerequisites are identified by a ~ symbol following the course number.

**Preferred Sequence and Requirements - A Track and B Track**

CIS 207 ~ .....	3 credits
Information Systems Fundamentals	
CMGT 245~ .....	3 credits
IS Security Concepts	
CIT 245 ~ .....	3 credits
Local Area Networking Fundamentals	
CIT 249 ~ .....	3 credits
Wide Area Network Environment	
CIT 274 ~ .....	3 credits
Routing and Switching Implementations	
CIT 276 ~ .....	3 credits
Routing and Switching Management	

The University reserves the right to modify the required course of study.

**Additional Admission Requirements for the AAIT/CCNA**

All applicants are expected to meet the following admissions requirements:

- Applicants must be at least 16 years of age at the time of application.
- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- South Carolina: Applicants attending a local campus in South Carolina must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit an Associate Degree posted transcript in lieu of the high school documentation. This may include a copy of a transcript or degree verification information from the institution's student website.

- Nevada: Applicants attending a local campus in Nevada must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit a college transcript which documents high school attended and date of completion or a copy of a DD-214 showing high school graduation or equivalency to satisfy this requirement.
- Tennessee: Students residing in Tennessee who are attending classes via the Online modality and students attending a local campus in Tennessee, including from any cross-border locations, must provide the university with an official High School transcript or official GED score (if applicable). A college transcript which documents high school attended and date of completion or a copy of a DD-214 showing high school graduation or equivalency may be submitted to satisfy this requirement.
- Applicants (including re-entry students) attending the Puerto Rico campus must meet the English language proficiency requirement for admission.

#### **Degree Requirements for the AAIT/CCNA**

- Completion of a minimum of 60 credits.
- A minimum grade point average (GPA) of 2.0.
- All students must complete the minimum number of credits required by their degree program.
- All undergraduate students are required to complete the minimum general education credits required by their program version.
- The diploma awarded for this program will read as follows:  
Associate of Arts

#### **General Education Requirements for the AAIT/CCNA**

The General Education requirements for this program are the following:

Communication Arts Requirement 6 credits

(A Track must include: COMM 215, equivalent, or higher and COMM 218)

(B Track must include: COM 170 and COM 172)

Mathematics Requirement 6 credits

(Must include MTH 209, equivalent, or higher)

Science & Technology Requirement 6 credits

(B Track must include: SCI 163)

Humanities Requirement 6 credits

(B Track must include: HUM 114)

Social Science Requirement 6 credits

(B Track must include: PSY 211)

Additional Liberal Arts Requirement 3 credits

(A Track must include: GEN 200)

(B Track must include: GEN 195)

Interdisciplinary Requirement 9 credits

(B Track must include: FP 120 and COMM 218)

All undergraduate students are required to complete the minimum general education credits required by their program version.

Students who lack .67 or fewer general education credits may use interdisciplinary or elective credits to waive the balance. Students must use interdisciplinary or elective credits to waive the general education balance in order to complete the minimum general education credits required for their program.

#### **Academic Progression Requirements for the AAIT/CCNA**

- All students entering undergraduate degree programs who list less than 24 previous college credits as recognized by the university on the admissions application will be enrolled in the B Track and are required to complete the First-Year Sequence.
- First-Year Sequence students must satisfy all seven (7) courses from the First-Year Sequence prior to enrolling in any other General Education, elective, or concentration courses.
- GEN 195 will be required as the first course in the First-Year Sequence.
- HUM 114 will be required as the last course in the First-Year Sequence. All other FYS requirements must be satisfied prior to enrolling in any other program applicable course.
- With the exception of GEN 195, FP 120, and HUM 114, course requirements may be satisfied by any of the following means:
  - University of Phoenix coursework,
  - Regionally or nationally accredited coursework (C- or higher grade),
  - University of Phoenix Prior Learning Assessment, (30 credit limit on experiential learning; 30 credit limit on professional training),
  - National Testing Programs, and
  - ACE evaluated Military credits.
- The course used to satisfy a First-Year Sequence course must be comparable in content to the university course It is replacing, must be at least a 2.67 credit course, and must be an equivalent level or higher level course.
- Concurrent enrollment is prohibited during any of the courses in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the university on the admissions application, will be enrolled in the A Track, must take GEN 200 Foundations for General Education and Professional Success as the first course with University of Phoenix and are not required to enroll in the First-Year Sequence.
- Students who list 24 or more previous college credits, as recognized by the University on the admissions application, and who do not enroll in the First-Year Sequence, may not enroll in any course from the First Year Sequence to satisfy programmatic prerequisites, general education or elective requirements. (e.g., taking COM 172 instead of COMM 215)
- Students who previously completed GEN 101, GEN 200, or GEN 300 and choose to transition to the First-Year Sequence are not required to take GEN 195.
- Students may not complete any of the First-Year Sequence courses via Directed Study.
- Many courses in the Required Course of Study build on or reinforce each other. To ensure that students have the requisite skills for specific coursework certain program areas must be satisfied before students can progress to others.

**Residency Requirements and Course Waivers for the AAIT/CCNA**

Students must meet the established University residency requirement for degree conferral. The University requires that the majority of coursework, 15 credits from a combination of the Required Course of Study, General Education, and Electives must be completed at University of Phoenix.

Students in this program may waive a maximum of 6 credits from their required course of study on the basis of regionally or approved nationally accredited transferable coursework.

In order to be granted a waiver for a course in the required course of study, the student must have completed a previous course which meets the following criteria:

- The course must have been completed at a regionally or approved nationally accredited, or candidate for accreditation, college or university.
- The course must have been completed within the past five years from current program enrollment agreement sign date with a grade of "C" (2.0) or better.
- The course must be comparable in content and credits to the University course it is replacing and must be an equivalent level or higher level course (i.e. graduate level coursework may be used to waive graduate or undergraduate coursework). Course descriptions must be included with the course waiver form in order for the Office of Admissions and Evaluation to review the course waiver request.

The following courses in the required course of study may not be waived: GEN 200, GEN 195.

**Course Descriptions for the AAIT/CCNA**

CIS 207 ..... 3 credits

**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.

CMGT 245 ..... 3 credits

**IS Security Concepts**

This course introduces general concepts of information systems security. Content includes governmental views, positions and processes of national security. Coursework explores other concepts, including contingency and business resumption planning, backup schemes and implementation strategies, as well as various types of invasive actions and prevention measures.

CIT 245 ..... 3 credits

**Local Area Networking Fundamentals**

This course addresses the fundamentals of local area networking (LAN). Students will learn about Ethernet LANs, wireless LANs (WLAN), and LAN connections. This will include securing the network, transmission control protocol / internet protocol (TCP/IP), troubleshooting switches, WLAN security, and constructing a network address scheme.

CIT 249 ..... 3 credits

**Wide Area Network Environment**

This course provides students with the knowledge and skills necessary to implement and support a small to medium size network using wide area networking technologies. This course covers wide area networks (WAN) connections, network environment management, small network implementation, and medium sized switched network construction. It includes enabling the internet connection, router startup and configuration, and securing the expanded network.

CIT 274 ..... 3 credits

**Routing and Switching Implementations**

This course provides students with the knowledge and skills necessary to design, build, and maintain routing and switching technologies. Instruction covers constructing medium-sized routed networks, implementing Single-Area Open Shortest Path First (OSPF) routing protocol, Enhanced Interior Gateway Routing Protocol (EIGRP), and applying Access Control Lists (ACLs). It includes a review of routing operations and implementing Variable Length Subnet Masking (VLSM).

CIT 276 ..... 3 credits

**Routing and Switching Management**

This course provides the knowledge and skills necessary for routing and switching management. The course covers address space management and local area network (LAN) extension into a wide area network (WAN). This includes network address translation (NAT) and port address translation (PAT), virtual private network (VPN) solutions and frame relay connectivity.

COMM 215 ..... 3 credits

**Essentials of College Writing**

This course covers the essential writing skills required for college-level coursework. Students will learn to distinguish between interpretive and analytical writing while using the writing process and specific rhetorical strategies to develop position and persuasion essays and a case study analysis, and learning teams will prepare an applied research paper. The course offers exercises for review of the elements of grammar, mechanics, style, citation, and proper documentation.

COM 170 ..... 3 credits

**Elements of University Composition and Communication I**

This course addresses the key elements necessary for effective academic writing in college. The course begins with focus on pre-writing strategies and builds to drafting and revising essays. In addition, the course includes skill development at the sentence and paragraph level.

COM 172 ..... 3 credits

**Elements of University Composition and Communication II**

This course builds upon the foundations established in Com155. It addresses the various rhetorical modes necessary for effective college essays: narration, illustration, description, process analysis, classification, definition, comparison and contrast, cause and effect, and argumentation. In addition, requirements for research essays, including the use of outside sources and appropriate formatting, are considered.

MTH 209 .....3 credits  
**College Mathematics II**

This course continues the demonstration and examination of various basic algebra concepts that was begun in MTH 208: College Mathematics I. It assists in building skills for performing more complex mathematical operations and problem solving than in earlier courses. These concepts and skills should serve as a foundation for subsequent quantitative business coursework. Applications to real-world problems are emphasized throughout the course. Specific applications to disciplines such as statistics, accounting, finance, and economics are demonstrated and discussed. A variety of other applications, such as geometry, personal finance, science, and engineering, are also demonstrated and discussed.

SCI 163 .....3 credits  
**Elements of Health and Wellness**

This course reinforces the concept that learning effectively and living well involves both the mind and body. It presents the fundamentals of wellness and preventive health including strategic planning to attain and maintain personal optimal health. In addition, physical and mental diseases are discussed along with the dangers of environmental pollution, stress, addiction, and other negative factors that can affect personal health.

HUM 114 .....3 credits  
**Critical Thinking and Creative Problem Solving**

This course focuses on developing the critical and creative thinking skills necessary to analyze and solve problems, make decisions, implement strategies, and formulate well supported points of view on key academic, social, and professional issues. The principles of creative thinking are essential to critical thinking skills. Students will learn how to evaluate their ideas and how to communicate their points of view persuasively.

PSY 211 .....3 credits  
**Essentials of Psychology**

This course overviews the foundations of psychology as the field applies to everyday life. The physical and mental aspects of psychology are traced through lifespan development with emphasis on psychological health and wellness. Further study focuses on personality; thinking, learning and memory; motivation and emotions; and gender and sexuality. Based in various historical traditions, the course is set in the context of contemporary psychological principles.

GEN 200 .....3 credits  
**Foundations for General Education and Professional Success**

This general education course is designed to introduce the intentional learner to communication, collaboration, information utilization, critical thinking, problem solving and professional competence and values. The course uses an interdisciplinary approach for the learner to develop personal, academic strategies in order to reach desired goals and achieve academic success.

GEN 195 .....3 credits  
**Foundations of University Studies**

The essential information, skills, tools, and techniques necessary for academic success and personal effectiveness at the University of Phoenix are introduced in this course. The course develops and applies practical knowledge and skills immediately relevant to first-year university students. Course topics include goal setting and working with personal motivation, understanding and using University resources, developing efficient study habits, making the most of personal learning styles, and how best to manage time and reduce personal stress levels.

FP 120 .....3 credits  
**Essentials of Personal Finance**

This course provides an overview of the elements necessary for effective personal financial planning and the opportunity to apply the techniques and strategies essential to this understanding. Primary areas of study include creating and managing a personal budget, understanding and paying taxes, working with financial institutions, wise use of credit cards and consumer loans, financing automobiles and homes, and the use of insurance for protecting one's family and property.

GEN 101 .....3 credits  
**Skills for Lifelong Learning**

This course is designed to provide core competencies for adult learners. The course examines learning theory and the application of adult learning principles to communication skills, group processes, and personal management. Adult learners will develop strategies for achieving University of Phoenix Learning Goals in school, work, and personal settings. They will also be introduced to the University Library and learn how to access resources successfully.

GEN 300 .....3 credits  
**Skills for Professional Development**

This course examines the skills necessary for successful critical thinking, teamwork, research, and communication. The course is designed to aid adult learners in acquiring and improving the core competencies that are necessary at the University of Phoenix. Students will examine their reasons for returning to school, and develop strategies for achieving educational goals in school, work, and personal settings. Students will also be introduced to the University library and learn how to access its resources successfully.

**Associate Programs Pathways Program**

Non-degree seeking students are permitted to take courses if admitted into the Pathways Program. The Pathways Program is designed for current high school juniors and seniors seeking to earn college credits while still enrolled in secondary schools. Pathways students may earn a maximum of 12 credits at the University of Phoenix. Non-degree students are not eligible to receive most types of financial aid or veterans benefits and must demonstrate English proficiency, if applicable, to be eligible for course enrollment. The Pathways Program admissions process must be completed before enrollment in any courses.

Admission into the Pathways program requires:

- Pathways Non-degree Application
- High School Junior or Senior Standing
- Pathways students must meet all prerequisite requirements for the program in which the courses are included. Students must also meet all admission requirements, with the exception of the HS diploma or equivalent
- Parent or guardian consent
- \$25 application fee

Before proceeding beyond 12 credits, Pathways program students must submit a University of Phoenix degree seeking application for admission, possess a high school diploma (or equivalent), and be granted acceptance to the University of Phoenix. Pathways students who want to earn more than 12 credits will be deemed degree seeking and be required to submit an application for admission to a University of Phoenix degree program.

*Note: The Pathways Program is not available in all states. Please consult an enrollment counselor to determine if residents of a specific state are eligible for this program.*

**THIS PAGE WAS LEFT BLANK INTENTIONALLY**

---

## COLLEGE OF NURSING

---

The College of Nursing offers both undergraduate and graduate (see the graduate section of this catalog) degrees to prepare students to expand their career options in the dynamic and rapidly changing health care environment.

### Undergraduate Programs

- LP/VN to Bachelor of Science in Nursing
- RN to Bachelor of Science in Nursing

### Graduate Programs

- Master of Science in Nursing
- Master of Science in Nursing/Healthcare Education
- Master of Science in Nursing/ Informatics
- Master of Science in Nursing/Family Nurse Practitioner
- Post Master Certificate - Family Nurse Practitioner
- Master of Health Administration/Master of Science in Nursing
- Master of Business Administration/Health Care Management/Master of Science in Nursing
- Master of Science in Nursing/Master of Health Administration
- Master of Science in Nursing/Master of Business Administration/Health Care Management

The College of Nursing works closely with other academic departments to assure that the students receive appropriate and well-rounded education. The College also works cooperatively with the College of Arts and Sciences to give breadth to the undergraduate experience through the integration of general education and professional course work. The programs are also designed to assure that computer competencies are incorporated into the curriculum.

### Nursing

The Nursing programs are designed to respond to the educational needs of licensed nurses. The College offers employed nurses opportunities to participate in accredited degree programs developed to broaden their professional horizons. Nursing programs are accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, 202-887-6791.

These programs are designed specifically for nurses who desire a repertoire of skills and knowledge necessary to respond effectively to today's dynamic health care environment. The programs also equip nurses with essential skills necessary to assume a leadership role in resolving the challenges faced by health care organizations and personnel. Each program has a blend of theory and practice which fosters a learning environment that allows nurses to build their knowledge base and to effectively and creatively apply what they have learned.

The University of Phoenix offers RN to BSN students the ability to transition into the Master of Science in Nursing degree program. Students may complete two graduate courses as part of their undergraduate work, thus creating the pathway for a smooth transition into the graduate program.

### International Nursing Honor Society

---

The vision of Sigma Theta Tau is to create a global community of nurses who lead in using scholarship, knowledge, and technology to improve the health of the world's people. The society provides support for the professional development of members who strive to improve nursing care worldwide.

Omicron Delta is the Sigma Theta Tau chapter of the University of Phoenix, College of Nursing members. Membership to Sigma Theta Tau is by invitation to baccalaureate and graduate nursing students who demonstrate excellence in scholarship, and to nurse leaders who demonstrate exceptional achievement in nursing.

The undergraduate student must have at least a 3.0 grade point average on a 4.0 scale, be in the upper 35 percent of his/her graduating class, have completed at least one-half of the nursing curriculum to qualify for membership and meet the expectation of academic integrity. The graduate student must have at least a 3.5 grade point average on a 4.0 scale and have completed at least one-half of the nursing curriculum to qualify for membership.

More than 300,000 nurse scholars have been inducted into Sigma Theta Tau. With 120,000 active members, it is the second-largest and one of the most prestigious nursing organizations in the world. The society's members are active in more than 90 countries and territories, and the 424 chapter honor societies are located on more than 523 college and university campuses in United States, Australia, Brazil, Canada, Hong Kong, the Netherlands, Pakistan, South Korea, and Taiwan.

Omicron Delta has close to 5,000 active members worldwide. The chapter was originally chartered in 1996 and has grown to be one of the largest chapters in the international organization. To learn more about Omicron Delta visit the Web site <http://www.omicrondelta.net>.

### Academic Progression Requirements for all Current Nursing Programs (excluding BSN/I)

---

Any student who demonstrates behaviors in a clinical, classroom, or laboratory setting that gives rise to a reasonable suspicion, of substance abuse or otherwise indicates that the student may be impaired by drugs or alcohol, without reasonable justification will be required to undergo a "for-cause" 10 panel, plus alcohol drug test.

- For purposes of this policy, the following definitions apply:
  - Drug testing means the scientific analysis of urine, blood, breath, saliva, hair, tissue, and other specimens from the human body for the purpose of detecting the use of drugs or alcohol.

- Reasonable suspicion means evidence which forms a reasonable basis for concluding that it is more likely than not that a person is impaired by alcohol or drugs or has engaged in substance abuse. Facts which could give rise to reasonable suspicion include, but are not limited to: the odor of alcohol or drugs, impaired behavior such as slurred speech, decreased motor coordination, difficulty in maintaining balance, marked changes in personality or job performance, and unexplained accidents, without reasonable justification. Such evidence may come from a professional or expert opinion, layperson opinion, scientific tests, or other sources or methods.
  - Illegal drug means any drug which is not legally obtainable; any drug which is legally obtainable but has not been legally obtained; any prescribed drug not legally obtained; any prescribed drug not being used for the prescribed purpose or by the person for whom it was prescribed; any over-the-counter drug being used at a dosage level other than that recommended by the manufacturer, or being used for a purpose other than the purpose intended by the manufacturer; and any drug being used for a purpose or by a person not in accordance with bona fide medical therapy. Examples of illegal drugs include, but are not limited to, stimulants; depressants; narcotic or hallucinogenic drugs; cannabis substances, such as marijuana and hashish; cocaine; heroin; methamphetamine; phencyclidine (PCP); and so-called designer drugs and look-alike drugs.
  - Impaired means that a person's mental or physical capabilities are reduced below his or her normal levels without reasonable justification. . An impaired student manifests deterioration in the level of function as compared to that previously observed, or the student does not function at a level normally expected under the prevailing circumstances. Impairment may exist in one or more multiple domains, including psychomotor activity and skills, conceptual or factual recall, integrative or synthetic thought processes, judgment, attentiveness, demeanor and attitudes as manifested in speech or actions. Impairment will include addiction to and/or physical dependence upon alcohol or illegal drugs.
  - Substance abuse means:
    - the consumption, possession, or distribution of alcohol or illegal drugs by any nursing student while on University or affiliated clinical site premises or while participating in any University (or affiliated clinical site) sponsored or related activity, including any nursing-related course or clinical training activity.
    - a nursing student's use of alcohol or any drug in such a way that the student's performance in any nursing course, including activities at any clinical site, is impaired.
  - Prior to being assigned to a clinical placement and as a prerequisite for placement at any agency or health care facility the nursing student shall sign an agreement:
    - to abide by the drug policies and drug testing policies of the University and each agency or health care facility in which a student is assigned as applicable,
    - to submit to any "for cause" drug testing required by the University and testing required by each agency or health care facility the nursing student obtains clinical hours, and
      - to release a copy of any and all drug test results to the University of Phoenix, Dean/Associate Dean of Nursing, other appropriate University officials, and to any State Board(s) of Nursing in which the student holds a nursing license or certificate, where required by the relevant State Board(s) of Nursing.  
Failure to sign such agreement is grounds for refusal for student admission and progression in the program.
  - The College of Nursing requires students to obtain a 10 panel, plus alcohol drug test if the student's behavior in the clinical, classroom or laboratory setting creates facts that give rise to a reasonable suspicion of substance abuse, or indicates they are impaired by alcohol or drugs.
  - If the results of the 10 panel, plus alcohol drug test is negative for alcohol or illegal drugs:
    - The student shall meet with their Campus College Chair, Director of Nursing, or NP Program Manager within 24 hours or by the first business day following the test results to discuss the circumstances surrounding suspected behavior.
    - The Campus College Chair, Director of Nursing, or NP Program Manager will counsel the student regarding return to the classroom and clinical agency. The preliminary investigation will cease and the student will be released from further action at that time.
    - The Campus College Chair, Director of Nursing, or NP Program Manager will arrange for the student to make up the missed clinical hours.
  - If the results of the 10 panel, plus alcohol drug test is positive for alcohol or illegal drugs:
    - A full review by the Office of Dispute Management and Apollo Ethics and Compliance shall be conducted. Students who test positive for alcohol or illegal drugs will not be permitted to return to any clinical setting pending conclusion of the review. The findings may result in student dismissal from the nursing program and expulsion from the University.
    - The results of the positive test for alcohol or illegal drugs shall be reported to the applicable State Board(s) of Nursing, if required by the applicable State Board(s), by the Campus College Chair, Director of Nursing, or NP Program Manager.
  - If the results of the 10 panel, plus alcohol drug test(s) are positive for a prescribed drug(s) but not those that would be defined as illegal in the definitions above:
    - The student shall, within three (3) business days, obtain a written statement from their treating, licensed health care provider (MD, DO, HMD, ND/NMD, NP or PA) stating that:
      - the drug level is within prescribed limits.
      - the level does not indicate abuse.
      - the student's use of the drug as prescribed will not interfere with safe practice in the clinical area.
- This statement must be provided to the Campus College Chair, Director of Nursing, or NP Program Manager. If the statement is approved, then the test result will be deemed acceptable and not failed for these purposes.
- The failure of a student to provide the above statement or a health care provider's inability to provide a statement meeting the requirements above shall be treated as a positive test for an illegal drug.

- Students who refuse to submit to a "for-cause" drug test will not be allowed to return to any clinical setting pending conclusion of a full review by the Office of Dispute Management and Apollo Ethics and Compliance. The findings may result in dismissal from the nursing program and expulsion from the University. The results of a positive test for illegal drugs as defined herein or a refusal to undergo a required drug test will be reported to the applicable State Board of Nursing where required by the applicable State Board(s) of Nursing's statute(s) or regulation(s).
- Students must also adhere to any other additional policies prescribed by the clinical agency. It is the sole responsibility of the student to read and acknowledge the requirements of the clinical health care facility in addition to University policy.
- All costs associated with the drug test, including any transportation costs to or from the drug testing facility, will be the responsibility of the student.
- University of Phoenix, College of Nursing, campus officials may be required to report all failed drug tests to each State Board of Nursing in which the student holds a nursing license or certificate. Campus officials shall report test results to all applicable State Boards of Nursing as described in the applicable Board's statutes and/or regulations.

**Bachelor of Science in Nursing**

*The following Bachelor of Science in Nursing (BSN) program may be offered at these University of Phoenix campus locations: Online, depending on state of residence. The availability of programs and concentrations depend on student demand and other factors. Not all programs may be available to all residents of all states. Students may want to consider completing certain courses in the Online classroom at Online rates if the program is available via the Online modality in their state. Please contact your enrollment advisor for more information.*

The Bachelor of Science in Nursing (BSN), accredited by the Commission of Collegiate Nursing Education (CCNE)\*, is a program designed to develop the professional knowledge and skills of registered nurses. The curriculum builds on a foundation of biological, physical, and social sciences, which contribute to the science of nursing. The liberal arts components enhance the development of the intellectual, social, and cultural aspects of the professional nurse. This baccalaureate program includes behavioral objectives that concentrate on the development of the nurse's role as caregiver, teacher, and leader. Utilizing human caring as a framework, registered nurses are prepared as generalists who are able to apply critical thinking, professional skills, and knowledge to client outcomes and health care systems. The Bachelor of Science in Nursing degree program has a 41-credit required course of study and a 6-credit elective requirement. The required course of study includes a capstone course that synthesizes baccalaureate outcomes. The required course of study fulfills only part of the 120-minimum-credit requirement for degree completion. \* For more information about accreditation, please contact CCNE at One Dupont Circle NW, Suite 530, Washington, DC 20036-1120; (202)887-6791.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at <http://www.phoenix.edu/programs/bsn>.

**Required Course of Study for the BSN**

Courses requiring prerequisites are identified by a ~ symbol following the course number.

HCS 301 .....	2 credits
Undergraduate Nursing Studies	
NUR 391 ~ .....	3 credits
Professional Nursing Practice	
HCS 350 ~ .....	3 credits
Health Care Communication	
NUR 403 ~ .....	3 credits
Theories and Models of Nursing Practice	
NUR 427 ~ .....	3 credits
Health and Chronic Disease Management	
NUR 440 ~ .....	3 credits
Health Assessment and Promotion for Vulnerable Population	
HCS 438 ~ .....	3 credits
Statistical Applications	
NUR 443 ~ .....	3 credits
Evidence-Based Nursing Research and Practice	
NUR 405 ~ .....	4 credits
Health Communities: Theory and Practice (50 Clinical hours)	
NUR 408 ~ .....	4 credits
Epidemiology: Global and Public Health (50 Clinical hours)	
HCS 478 ~ .....	3 credits
Health Law and Ethics	
HCS 482 ~ .....	3 credits
Health Care Informatics	
NUR 492 ~ .....	4 credits
Senior Practicum: Leadership and Management	

The University reserves the right to modify the required course of study. All grades of "F" or grades not meeting minimum specific course grade requirements must be repeated.

**Additional Admission Requirements for the BSN**

- High school graduation from an institution that holds state approval to confer high school diplomas or are accredited or a candidate for accreditation at the time the student attended by an acceptable accrediting body, GED certificate or CHSPE (California High School Proficiency Examination) certificate.
- South Carolina: Applicants attending a local campus in South Carolina must submit a copy of their high school diploma, high school transcript with graduation posted, GED certificate, GED transcript with successful completion posted, CHSPE examination results or a letter on letterhead from the high school records office confirming the date of graduation. Students may submit an Associate Degree posted transcript in lieu of the high school documentation. This may include a copy of a transcript or degree verification information from the institution's student website.