



CCAF Associates

**Information Systems Technology
and
Computer Science Technology**



To

**Bachelor of Science and Computer and
Information Science, Network Security**

Program Overview

Computer programs tell the computer what to do, which database information to identify and access, how to process it, and what equipment to use. Computer programs vary widely depending upon the type of information to be accessed or generated.

This hands-on, interactive educational program equips students with the computer programming and information process skills required for career-entry positions in a wide range of positions. Students are introduced to a variety of operating system environments and programming languages.

Program Outcome

Students in the bachelor's degree in Computer & Information Science program learn how to manage projects, design and write different computer programs, create interesting web pages, use and maintain databases, and install and secure computer networks. Students also learn to provide excellent customer service when assisting customers and clients with technical issues.

Upon successful completion of the Bachelor of Science in Computer and Information Science, graduates are able to:

- Utilize organizational customer service plans.
- Analyze various aspects of business operations.
- Evaluate the impact of information systems upon the operation of a business.
 - Utilize PC operating system concepts.
- Effectively utilize PC productivity applications and concepts to include word processing, spreadsheets, and presentation graphics.
- Construct a basic web page.
- Correctly install basic network hardware and software by applying industry-standard networking knowledge.
- Demonstrate a working knowledge of the professional and ethical responsibilities of an information system specialist.
- Identify ethical uses of organizational data, applications, computers, and network operating systems.

- Apply basic logical constructs such as flow charts and process diagrams in order to understand the operation and troubleshooting of information systems.
- Design a basic relational database management application.
- Evaluate program-specific knowledge for an individual subject area concentration (e.g., Network Security or Web Development) appropriate for a Bachelor of Science Degree.
- Demonstrate comprehensive knowledge of subject area concentration via successful completion of a capstone project, including an oral and written defense.
- Network Security students learn how to design, implement, and administer computer networks.

***ECPI is a Category III partner and requires students to complete more than 60 semester hours of credit beyond the AAS but meet all other AU-ABC specifications.**

**** The college may accept credits from an institution recognized by the Council of Higher Education Accreditation (CHEA). ECPI will accept credit toward a degree or certificate for satisfactory performance on the Advanced Placement of the College Board (AP), College-Level Examination Program (CLEP), and Defense Activity for Non-Traditional Support (DANTES) exams. Prospective students should contact the college for a list of exams that apply to CLEP and DANTES. A minimum score of 50 is required to receive transfer credit.**

*****In addition to courses listed under Advanced Technical requirement, a student's schedule may consist of other courses in this concentration or other concentrations. The Advanced Technical requirement is 33 credits. Students can satisfy the credit requirement by transferring applicable courses from their CCAF Technical Electives and taking a combination of courses listed in the Advanced Technical section of the degree plan.**

Degree Program Requirements

Degree Requirement	Required Semester Credits	Possible CCAF Transfer Credits	Courses to take at Institution
Core/Area of Focus	24		
BUS102 Fundamentals of Customer Service	3		
BUS121 Introduction to Business	3		
BUS 472 Applied Project Management	3		
CIS121 Logic and Design	3		
CIS150 Network I	3		
CIS223 Database I	3		
CIS282 Web Interface Design	3		
CIS495 Senior Capstone	3		
Required Concentration Courses	24		
CIS225 Networking II	3		
CIS202 Introduction to Routing and Switching	3		
CIS204 Intermediate Routing & Switching	3		
CIS206 Unix Administration	3		
CIS212 Network Security	3		
CIS245 Windows Client & Server	3		
CIS403 Ethical Hacking	3		
CIS410 Security Systems Administration	3		
Arts & Sciences	31	15	16
ENG110 College Composition	3	3	

ENG120 Advanced Composition	3		3
COM115 Principals of Communication	3	3	
MTH131 College Algebra	3	3	
MTH140 Statistics or MTH200 PreCalculus	3		3
PHY120 Physics	3		3
PHY120L Physics Lab	1		1
PSY105 Introduction to Psychology	3	3	3
PSY220 Positive Psychology or SOC100 Introduction to Sociology or ECO201 Macroeconomics or ECO202 Microeconomics	3		3
HUM205 Culture and Diversity	3	3	
CAP480 Arts & Sciences Capstone	3		3
Self-Integration & Computer Literacy	9		
FOR110 Essentials for Success	3		
CIS115 Computer Applications	3		
CIS106 Introduction to Operating Systems	3		
COR090 Career Orientation	0		
Advanced Technical Credits	33		
CIS126 Programming I	3		
CIS207 Network Routing & Switching Lab	1		
CIS245L Windows Client & Server Lab	1		
CIS251 Advanced Windows Server	3		
CIS256 Windows Active Directory	3		
CIS250 Database Scripting	3		
CIS305 Advanced Unix Administration	3		
CIS305L Advanced Unix Administration	3		
CIS425 Adv. Network Defense & Countermeasures	3		
CIS425L Adv. Network Defense & Countermeasures Lab	1		
CIS311 Web Site Management	3		
IST472 IT Project Management	3		
IST472L IT Project Management Lab	1		
IST321 Network Scripting	3		
EET250 Computer Configuration I	3		
EET251 Computer Configuration II	3		
EET251L Computer Configuration II Lab	1		
CIS490 Senior Externship	3		
CAP490 Senior Capstone	3		
Bachelor of Science Degree Total Credits Required	121	15	106

****This is a snapshot of possible transfer credits into the BS Network Security Program could. An official transcript evaluation is required to receive applicable transfer credit towards the Network Security degree.