INFORMATION AND COMMUNICATION TECHNOLOGY (AAS)

Degree: Associate of Applied Science
Major: Information and Communication Technology
Program Code: 1318

This program, Information and Communication Technology, prepares students for a variety of specializations within the rapidly evolving information and communications technology field. The core of the program is the Cisco Certified Network Associate (CCNA) series of classes. As computer network security has become a major focus in the industry, course content will reflect this emphasis. These classes are the best path to achieving Cisco and CompTia certifications.

It is designed to educate students in areas of business-class computer hardware and software, convergent data/voice/media communication hardware and software, computer network hardware and software, and the Internet of Things hardware and software. The program utilizes CISCO curriculum for most courses, including the core Cisco Certified Network Associate (CCNA) courses to prepare students for the certification exam.

Curriculum is accredited, approved and aligned with national and international certifications by major business and industry in the networking and ICT career fields.

For more information on what you can do with this major, visit CMU Tech's Programs of Study page.

All CMU/CMU Tech associate graduates are expected to demonstrate proficiency in specialized knowledge/applied learning, quantitative fluency, communication fluency, critical thinking, personal and social responsibility, and information literacy. In addition to these campus#wide student learning outcomes, graduates of this major will be able to:

1. Apply business communication skills, listening, verbal, written, and electronic, needed for entry level information technology employment. (Communication Fluency)
2. Apply mathematical concepts to meet information technology industry employment requirements. (Quantitative Fluency)
3. Research, evaluate, synthesize and apply information/data relevant to information technology careers. (Critical Thinking)
4. Demonstrate knowledge of terminology, symbols, business practices, and principles and application of information technology technical skills. (Specialized Knowledge/Applied Learning)
5. Demonstrate ethical, civic, and work place responsibility as part of information technology professional behavior. (Specialized Knowledge)

Requirements

Each section below contains details about the requirements for this program. Select a header to expand the information/requirements for that particular section of the program's requirements.

To print or save an overview of this program's information, including the program description, learning outcomes, requirements, suggested course sequencing (if applicable), and advising and graduation information, scroll to the bottom of the left-hand navigation menu and select "Print Options." This will give you the options to either "Send Page to Printer" or "Download PDF of This Page." The "Download PDF of This Page" option prepares a much more concise presentation of all program information. The PDF is also printable and may be preferable due to its brevity.

Institutional Degree Requirements

The following institutional degree requirements apply to all CMU and CMU Tech Associate of Applied Science (AAS) degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 60 semester hours minimum.
- Students must complete a minimum of 15 of the final 30 semester hours of credit at CMU/CMU Tech.
- 2.00 cumulative GPA or higher in all CMU/CMU Tech coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 20 semester credit hours for an AAS degree.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

Specific to this program:

- 67-68 semester hours total for the AAS Information and Communication Technology.

Essential Learning Requirements

(15-16 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

Code	Title	Semester Credit Hours
Communication		
ENGL 111	English Composition I-GTCO1	3
Select one of the following courses:		3
ENGL 112	English Composition II-GTCO2	
SPCH 101	Interpersonal Communication	
SPCH 102	Speechmaking	
Mathematics		

MATH 108	Technical Mathematics (or higher)	3 - 4
Other Essential Learning Core Courses		
Select one Social and Behavioral Sciences, History, Natural Sciences, Fine Arts or Humanities course		3
Select one Social and Behavioral Sciences, History, Natural Sciences, Fine Arts or Humanities course		3
Total Semester Credit Hours		**15-16**

Other Lower Division Requirements

Code	Title	Semester Credit Hours
Wellness Requirement		
KINE 100	Health and Wellness	1
Select one Activity Course		1
Total Semester Credit Hours		**2**

Program Specific Degree Requirements

(50 semester hours, each course must be completed with a grade of "C" or higher.)

Code	Title	Semester Credit Hours
ABUS 160	Introduction to Customer Service	3
ABUS 257	Managing Office Technology I	3
CSCI 110	Beginning Programming	3
TECI 120	A+ Certification Preparation	3
TECI 131	Principles of Information Assurance (Security+ Prep)	3
TECI 132	Introduction to IT Hardware and System Software	3
TECI 180	Cisco Networking I	3
TECI 185	Cisco Networking II	3
TECI 201	Linux Configuration (OS)	3
TECI 211	Windows Configuration (OS)	3
TECI 230	Cisco Networking III	3
TECI 242	Cloud Computing	3
TECI 243	Hybrid Servers Integration	3
TECI 244	Windows Automation and Management Program	3
TECI 257	Network Defense and Counter Measures (CySA+ Preparation)	4
TECI 270	Cisco Cybersecurity Operations Fundamentals (CBROPS)	4
Total Semester Credit Hours		**50**

Suggested Course Plan

First Year

Fall Semester		Semester Credit Hours
ABUS 160	Introduction to Customer Service	3
ABUS 257	Managing Office Technology I	3
MATH 108	Technical Mathematics (or higher)	3-4
TECI 120	A+ Certification Preparation	3
TECI 132	Introduction to IT Hardware and System Software	3
KINE 100	Health and Wellness	1
	Semester Credit Hours	**16-17**
Spring Semester		
CSCI 110	Beginning Programming	3
ENGL 111	English Composition I-GTCO1	3
TECI 180	Cisco Networking I	3
TECI 211	Windows Configuration (OS)	3
TECI 242	Cloud Computing	3
Select one KINA Activity course		1
	Semester Credit Hours	**16**
Second Year		
Fall Semester		
TECI 131	Principles of Information Assurance (Security+ Prep)	3
TECI 185	Cisco Networking II	3
TECI 201	Linux Configuration (OS)	3
TECI 243	Hybrid Servers Integration	3
Select one of the following:		3
ENGL 112	English Composition II-GTCO2	
SPCH 101	Interpersonal Communication	
SPCH 102	Speechmaking	
Select one Social and Behavioral Sciences, History, Natural Sciences, Fine Arts, or Humanities course		3
	Semester Credit Hours	**18**
Spring Semester		
TECI 230	Cisco Networking III	3
TECI 244	Windows Automation and Management Program	3
TECI 257	Network Defense and Counter Measures (CySA+ Preparation)	4
TECI 270	Cisco Cybersecurity Operations Fundamentals (CBROPS)	4
Essential Learning - Social and Behavioral Sciences, Natural Sciences, Fine Arts or Humanities course		3
	Semester Credit Hours	**17**
	Total Semester Credit Hours	**67-68**

Advising and Graduation

Advising Process and DegreeWorks

Documentation on the pages related to this program is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for their intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.

- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found on the Graduation web page.

If a student's petition for graduation is denied, it will be their responsibility to apply for graduation in a subsequent semester. A student's “Intent to Graduate” does not automatically move to a later graduation date.