

# NETWORK TECHNICIAN, INFORMATION AND COMMUNICATION TECHNOLOGY (TECHNICAL CERTIFICATE)

Award: Technical Certificate

Program of Study: Information and Communication Technology

Specialization: Network Technician

Program Code: 1118

This certificate is based on the Cisco CCNA Routing and Switching series of courses and prepares students for the Cisco Certified Network Associate exam. The CCNA certification will prepare students for any entry-level networking career. Additional classes cover computers, information security, convergent communications technologies, best practice customer relations and workplace behavior.

The coursework in this certificate is aligned with national and international certifications including Cisco, A+/N+, CET, and Convergent Technology Professional (CTP). Program content has been structured to give a basic education to all graduates entering this field. Emphasis has been placed on providing a common core of training for all students due to the convergence of the communication industries.

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

All CMU/CMU Tech technical certificate graduates are expected to demonstrate proficiency in specialized knowledge/applied learning, communication fluency, and critical thinking. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Identify best practice information security policies. (Specialized Knowledge)
2. Demonstrate proficiency and knowledge required for basic use of computer hardware, software, and the Internet. (Specialized Knowledge)
3. Ability to install, configure and provide instruction on the basics of using common office software tools. (Critical Thinking)
4. Ability to identify, manage and overcome barriers to information technology communication. (Communication Fluency)

## 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 Certificate Requirements

The following institutional requirements apply to all CMU or CMU Tech Technical Certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Consists of 100-200 level courses.
- At least fifty percent of the credit hours must be taken at CMU/CMU Tech.
- 2.00 cumulative GPA or higher in all courses taken to satisfy certificate requirements.
- A grade lower than "C" will not be counted toward meeting the requirements.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed twenty-five percent of the semester credit hours required for a technical certificate.
- 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 Certificate Requirements.
- The Catalog Year determines which program sheet and certificate 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.

## Program Specific Certificate Requirements

(39-40 semester hours, must earn a grade of "C" or better in each course.)

Code	Title	Semester Credit Hours
<b>Required Courses</b>		
MATH 108	Technical Mathematics (or higher)	3-4
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 242	Cloud Computing	3

TECI 243	Hybrid Servers Integration	3
<b>Total Semester Credit Hours</b>		<b>39-40</b>

## Suggested Course Plan

### First Year

Fall Semester		Semester Credit Hours
MATH 108	Technical Mathematics (or higher)	3-4
ABUS 160	Introduction to Customer Service	3
ABUS 257	Managing Office Technology I	3
TECI 120	A+ Certification Preparation	3
TECI 132	Introduction to IT Hardware and System Software	3
<b>Semester Credit Hours</b>		<b>15-16</b>

### Spring Semester

CSCI 110	Beginning Programming	3
TECI 180	Cisco Networking I	3
TECI 211	Windows Configuration (OS)	3
TECI 242	Cloud Computing	3
<b>Semester Credit Hours</b>		<b>12</b>

### Second Year

Fall Semester		Semester Credit Hours
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
<b>Semester Credit Hours</b>		<b>12</b>
<b>Total Semester Credit Hours</b>		<b>39-40</b>

- 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.

## 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 certificate. 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 discussing the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for their intended certificate.

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 certificate 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 certificate requirements (for one-semester certificates, complete in the first week of class):

- 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.