



DEGREES

Associate of Science in Computer Networking

Total Credit Hours: 62

About Associate of Science in Computer Networking

The Associate of Science in Computer Networking is a program of study that prepares students for entry-level network technicians, computer technicians, and fiber and copper Cable Installers in the field of Information Technology (IT). Technical Requirement classes are designed to give students a firm foundation in the basics of computers, networking, and information systems. Elective courses allow the students to further specialize. This course of study will provide students with a practical overview of Information Technology, including hands-on experience configuring networking devices, network management, and will enable students to prepare for and attain industry certification through ETA and Cisco Systems.

REQUIREMENTS FOR DEGREE

General Education Requirements

Course	Course Name	Credits
EN__	English Composition Requirement	3
MA110A	Finite Mathematics	3
SI110/SI110L	Environmental Biology (3)& Environmental Biology Laboratory (1)	4
PY125	Interpersonal Relations	3
VC101	Introduction to Visual Communications	3
CS151	Windows Applications	3

Major Requirements

Course	Course Name	Credits
EE211	IT Essentials I	4
EE243	Fiber Optics Installation	3
EE283	Network Security +	3
EE265	Computer Networking I	5
EE266	Computer Networking II+	5
EE242	Principles of Voice and Data Cabling	2
EE267	Computer Networking III+	5

EE268	Computer Networking IV+	5
EE271	Advanced Computer Networking+	5
EE131	Server	3
EE292	Practicum	3
CS112	Introduction to Linux	3
EE130	Project Management for IT	3
	Program Total	62

2019-2020 College Catalog

[GENERAL EDUCATION REQUIREMENTS](#)

Recognizing the necessity for students to succeed in the complex and rapidly changing workplace, Guam Community College offers a general education curriculum that introduces students to major areas of knowledge and methods of inquiry. All degree programs require an interdisciplinary general education component that promotes the development of intellectual skills that enable students to become effective learners and informed citizens. Critical thinking, the use of language and computation, appropriate social skills, global awareness and respect for diverse opinions are among the learning outcomes provided in the general education requirements of each program.

Guam Community College believes that general education provides the academic foundation necessary for students to achieve their life goals. General education is intended to offer students a breadth of quality student learning experiences, encourage their respect for cultural heritage, promote their ethical and responsible social behavior and facilitate their life-long learning.

The General Education program strives to foster student learning and skill development in civic engagement, critical thinking, understanding of the relationship between the individual and society, information literacy, oral communication, quantitative reasoning, and written communication.

Guam Community College believes that high quality general education opportunities for all citizens are necessary for democratic principles and practices to exist and for a sound economy to flourish. The College continually scrutinizes the general education curriculum in order to assure that all degrees and certificates granted by the College support this vision of general education and that it serves as a means to inspire hope, opportunity and responsibility in all its constituencies.

Requirements for General Education follow the options described below. Students declared prior to fall 2010 will follow the requirements indicated in the applicable catalog in which they first declared their major program at the College.

Notes on General Education requirements

Students are advised to check the requirements for their specific programs before taking General Education courses.

Courses chosen to meet the general education requirements may not be used to meet the technical requirements of a student's specific degree program.

The list contains courses with pre-requisites, so students should make their choices carefully and thoughtfully. Students may consult a counselor or an academic advisor for guidance in choosing any of the course options listed.

IMPORTANT NOTE: Some programs require different levels of coursework to meet General Education requirements, please review the individual programs for more information.

General Education Requirements**English Composition (3 Credits)**

Course #	Course Name	Credits
EN 110	Freshman Composition	3
EN 111	Writing for Research	

Mathematics (3-4 Credits)

Course #	Course Name	Credits
MA 110A	Finite Mathematics	3
MA 161A	College Algebra & Trigonometry I	4
MA 161B	College Algebra & Trigonometry II	4

Natural & Physical Sciences (4-6 Credits)

Course #	Course Name	Credits
SI 101/101L	Introduction to Chemistry (3) & Introduction to Chemistry Laboratory (1)	4
SI 103/103L	Introduction to Marine Biology (3) & Introduction to Marine Biology Laboratory (1)	4
SI 105/105L	Introduction to Physical Geology (3) & Introduction to Physical Geology Laboratory (1)	4
SI 110/110L	Environmental Biology (3) & Environmental Biology Laboratory (1)	4
SI 130A/B	Anatomy & Physiology I (3) Anatomy & Physiology II (3)	6
SI 141	Applied Physics I	4

Social & Behavioral Sciences (3 Credits)

Course #	Course Name	Credits
SO 130	Introduction to Sociology	3
PY 120	General Psychology	
PY 125	Interpersonal Relations	
PY 100	Personal Adjustment	
HI 121	History of World Civilization I	

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HI 122 History of World Civilization II

Computer Literacy (3 Credits)

Course #	Course Name	Credits
CS 151	Windows Applications	3
CS 152	Macintosh Applications	

Humanities and Fine Arts (3-4 Credits)

Course #	Course Name	Credits
ASL 100	American Sign Language I	4
ASL 110	American Sign Language II	4
CH 110	Chamorro I	4
CH 111	Chamorro II	4
JA 110	Beginning Japanese I	4
JA 111	Beginning Japanese II	4
EN125	Introduction to Human Communication and Speech	3
EN 210	Introduction to Literature	3
HU 120	Pacific Cultures	3
HU 220	Guam Cultures & Legends	3
PI 101	Introduction to Philosophy	3
VC 101	Introduction to Visual Communications	3
TH 101	Introduction to the Theater	3
Minimum General Education Requirements		19

SUGGESTED SEQUENCE OF COURSES

Year 1			Year 2		
Semester 1			Semester 2		
Course	Course Name	Credits	Course	Course Name	Credits
EE265	Computer Networking I	5	EE267	Computer Networking III	5
EE266	Computer Networking II	5	EE268	Computer Networking IV	5
MA110A	Finite Mathematics	3	SI110/110L	Environmental Biology & Lab	4

EN__	English Requirement	3	EE283	Network Security	3
	Total	16		Total	17
Year 2					
	Semester 3			Semester 4	
Course	Course Name	Credits	Course	Course Name	Credits
EE271	Adv. Computer Networking I	5	EE242	Principle of Voice and Data	2
VC 101	Introduction to Visual Communications	3	EE243	Fiber Optics Installation	3
CS151	Windows Applications	3	EE211	IT Essentials I	4
	Elective - See elective list	3		Elective - See elective list	3
			PY 125	Interpersonal Relations	3
	Total	14		Total	15
	Year 1 Total	33		Year 2 Total	29
				Program Total	62

2019-2020 College Catalog

[Student Learning Outcomes](#)

Upon successful completion of the AS in Computer Networking program, students will be able to:

1. Install, configure, and repair computer networking systems.
2. Pass local and national certification tests in computer repair, telecommunications, and network administration
3. Communicate the values of an effective and productive technician in the telecommunication and computer networking industry.

Check out some of these amazing Associate of Science in Computer Networking courses...

EE283 Network Security

This course is targeted toward an Information Technology (IT) professional with the recommendation that he/she has networking and administrative skills in Windows-based TCP/IP networks and familiarity with other operating systems, such as NetWare, Macintosh, UNIX/Linux, and OS/2, who wants to: further a career in IT by acquiring a foundational knowledge of security topics; prepare for the CompTIA Security+ Certification examination; or use Security+ as the foundation for advanced security certifications or career roles.

[+ More Info](#) [1]

EE242 Principles of Voice and Data Cabling

This course is designed for students interested in the physical aspects of voice and data network cabling and installation. This course stresses documentation, design, installation, laboratory safety, as well as working effectively in group environments. Students will become familiar with cabling issues related to data and voice connectivity, media and transmission practices, and cabling customer support. This course provides an overview

of cabling and networking industry standards as well as emerging cabling technologies.

[+ More Info](#) [2]

EE211 IT Essentials I

IT Essentials 1 (ITE) emphasizes practical knowledge and experience to help students develop fundamental computer and career skills. ITE helps students prepare for entry-level career opportunities in IT and for the CompTIA A+ certification exam. The course also provides a learning pathway to Cisco CCNA Routing and Switching, Linux Essentials, and Introduction to the Internet of Everything (IoE).

[+ More Info](#) [3]

You may also be interested in these related Programs...



[4]

[Cisco Certified Network Professional \(CCNP\) Industry Certification](#) [4]

The courses listed below will prepare the student to take Cisco's CCNP exam. The CCNP certification indicates advanced knowledge of networks. These courses train the student to install, configure, and troubleshoot local and wide area networks for enterprise organizations with networks from 100 to more than 500 nodes. The content emphasizes topics such as security, converged networks, quality of service (QoS), virtual private networks (VPN) and broadband technologies. Coursework must be taken in sequence. After successful completion of the four professional networking courses, a student will be ready to take the Cisco CCNP exam.

[+ More Info](#) [4]



[5]

[Cisco Certified Network Associate \(CCNA\) Industry Certification](#) [5]

The courses listed below will prepare the student to take Cisco's CCNA exam. These courses prepare the student for configuration of networks using routers, switches and hubs (Local Area Network). Continuing coursework prepares the student to understand Wide Area Networks (WAN). Next, a student focuses on Network Layers, Cisco Internetwork Operating System software user interface, router configuration, startup and setup configuration sources for Cisco IOS software TCP/IP, configuration router interfaces with IP and routing protocols. Other coursework involves LAN design and implementation. Final preparatory coursework includes fundamentals of Wide Area Networks. Coursework must be taken in sequence. After successful completion of the four networking courses, a student will be ready to take the Cisco CCNA exam.

[+ More Info](#) [5]



[6]

[Associate of Science in Computer Science \[6\]](#)

The Associate of Science in Computer Science will provide opportunities for students to work as system analysts who design computer systems for processing information, programmers who write instructions and translate them into a machine readable language, computer operators who monitor and control computer systems and retrieve results, and data entry personnel who enter information and instructions into the computer.

[+ More Info](#) [6]