



DEGREES

Associate of Science in Civil Engineering Technology

Total Credit Hours: 70-77

About Associate of Science in Civil Engineering Technology

The Associate of Science in Civil Engineering Technology is a course of study that prepares students to analyze construction sites, use and maintain equipment, draft plans, and write reports. Technical requirement classes are designed to provide students with fundamentals in surveying, analyzing material strength, and structural drafting and design. This course of study will provide students with an overview of technical drawing, construction management and procedures, planning, and estimating. The student learning outcomes meet the professional standards of technicians in this field.

[REQUIREMENTS FOR DEGREE](#)

General Education Requirements		
Course	Course Name	Credits
EN110A	Freshman Composition	3
MA161A	College Algebra Trigonometry I	4
SI141	Applied Physics I	4
CS__	Computer Science Requirement	3
	Social Behavioral Science Requirement	3
	Humanities Requirement	3-4
Major Requirements		
Course	Course Name	Credits
AE121	Technical Engineering Drawing I	3
AE122	Technical Engineering Drawing II	3
AE138	Building Codes, Specifications Construction Management	3
AE160	Comp Aided Design Draft II	3
CE211	Plane Surveying I	3
CE213	Hydraulics	3
CE214	Structural Design	3
CE221	Strength of Materials	3
MA161B	College Algebra Trigonometry II	4
OR101	Introduction to Engineering	3

	Technology	
SI142	Applied Physics II	4
CE121	Properties of Materials	3
CE210	Statics	3
CE215	Construction Procedures	3
CE225	Construction Planning & Estimating	3
EN194	Technical Communication	3
Emphasis Courses (Optional)		
CE222	Plane Surveying II	3
CE 224	Highways	3
Program Total		70-71
Program Total (with emphasis courses)		76-77

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
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
EN110	Freshman Composition	3	MA161B	College Algebra & Trigonometry II	4
MA161A	College Algebra & Trigonometry I	4	SI141	Applied Physics I	4

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AE121	Technical Engineering Drawing I	3	AE122	Technical Engineering Drawing II	3
CE121	Properties of Materials	3	CE215	Construction Procedures	3
CS____	Computer Science Requirement	3		Social Behavioral Science Requirement	3
	Total	16		Total	17
Year 2 Semester 3			Semester 4		
Course	Course Name	Credits	Course	Course Name	Credits
CE211	Plane Surveying I	3	OR101	Introduction to Engineering Technology	3
SI142	Applied Physics II	4	CE214	Structural Design	3
AE138	Building Codes, Specifications & Construction Management	3	AE160	Comp Aided Design & Draft II	3
CE221	Strength of Materials	3	CE225	Construction Planning & Estimating	3
CE213	Hydraulics Humanities Requirement	3 3-4	CE210	Statics	3
	Total	19-20	EN194	Technical Communication	3
	Year 1 Total	33		Total	18
				Year 2 Total	37-38
				Program Total	70-71

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[Student Learning Outcomes](#)

Upon successful completion of the AS in Civil Engineering Technology program, students will be able to:

1. Properly use surveying equipment and tools and perform applications accordingly.
2. Create a construction drawing set consisting of at least six sheets from a design.
3. Perform basic techniques and skills using modern engineering tools in the current civil engineering industry.
4. Sequence the steps related to the construction process in chronological order.

Check out some of these amazing Associate of Science in Civil Engineering Technology courses...

AE138 Bldg Codes, Specs & Const Mgt

An interpretation and study of local and national building codes and standards, construction documents and office organization. This course will be of value to anyone who plans to enter, or is presently working in the field of construction.

[+ More Info](#) [1]

CE221 Strength of Materials

A study of the relationship between the stresses, strains, deformations, and loads applied to structural members. Axial, torsional, bending and combined stresses are discussed. Stability and the buckling of columns are introduced.

[+ More Info](#) [2]

CE211 Plane Surveying I

A beginning course in surveying techniques designed to give the student an understanding of the fundamentals of chaining, leveling, and proper use of the transit. Care and adjustment of instruments and office procedure are also considered. Provision is made by appropriate fieldwork for practical application of the techniques learned.

[+ More Info](#) [3]

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



[4]

[Certificate in Computer Aided Design & Drafting \(CADD\)](#) [4]

Computer Aided Design and Drafting (CADD) systems are used by drafters to prepare electronic drawings that can be viewed, printed, or programmed directly into automated manufacturing systems.

[+ More Info](#) [4]



[5]

[Associate of Science in Surveying Technology](#) [5]

The Surveying Technology program prepares the student for immediate employment as a surveying or Geographic Information Systems (GIS) technician and teaches the student knowledge and skills that will enable one to adapt to ever evolving technical and technological changes in geospatial field and office applications.

[+ More Info](#) [5]



[6]

[Associate of Science in Pre-Architectural Drafting](#) [6]

The A.S. in Pre-Architectural Drafting covers pre-architecture, building materials and properties, technical drafting, basic computer aided design and drafting (CADD), architectural computer modeling, and an introductory

engineering course.

[+ More Info](#) [6]