



DEGREE

Associate of Science in Pre-Architectural Drafting

Total Credit Hours: 66-67

About Associate of Science in Pre-Architectural Drafting

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. This program prepares students for entry-level employment as CADD operators, draftsmen/women, architect assistants, or as a bridge to enter a career as an Architect which requires a Bachelor's degree or higher. Graduates are prepared for the professional workforce with sound theoretical knowledge and hands-on experience. This program is an area emphasized in the Architecture & Construction Career Cluster; one out of 16 career clusters in Career & Technical Education.

REQUIREMENTS FOR DEGREE

General Education Requirements		
Course	Course Name	Credits
English (Choose 1)		
EN110A	Freshman Composition with Instructional Lab	4
EN110	Freshman Composition	3
Course		
Course Name		
Credits		
MA161A	College Algebra & Trigonometry I	4
CS151	Windows Applications	3
PY120	General Psychology	3
SI141	Applied Physics I	4
SO130	Introduction to Sociology	3
Major Requirements		
Course		
Course Name		
Credits		
AE103	Basic Blueprint Reading	3
AE121	Technical Engineering Drawing I	3
AE122	Technical Engineering Drawing II	3
AE138	Building Codes, Specifications & Construction Management	3
AE150	Computer Aided Drafting I (CAD I)	3
AE160	Computer Aided Drafting II (CAD II)	3
Choose 1		

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AE216	Descriptive Geometry	3
AE170	Revit Architecture Essentials	
Course	Course Name	Credits
CE121	Properties of Materials	3
CE215	Construction Procedures	3
CE221	Strength of Materials	3
CE225	Construction Planning & Estimating	3
EN194	Technical Communication	3
CS101	Introduction to Computer Systems & Information Technology	3
OR101	Introduction to Engineering Technology	3
MA161B	College Algebra & Trigonometry I	4
Program Total		66-67

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GENERAL REQUIREMENTS FOR ASSOCIATE DEGREE

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 Major 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		
Scope 1: Skills for and Application of Lifelong Learning		
Freshman Composition (Choose one course from the following to meet the required 3-4 credits)		
Course #	Course Name	Credits
EN 110	Freshman Composition	3
EN110A	Freshman Composition with Instructional Lab	4
EN 111	Writing for Research	3
Mathematics (Choose one course from the following to meet the required 3-4 credits)*		
Course #	Course Name	Credits
MA 110A	Finite Mathematics	3
MA 115	Fundamentals of College Algebra	3
MA 161A	College Algebra & Trigonometry I	4
*Any college level math will be considered for the completion of this category		
Literacy for Life Skills (Choose one course from the following to meet the required 3 credits)		
Course #	Course Name	Credits
CO 110	Critical Thinking for Civic Engagement	3
CS 151	Windows Applications	
CS 152	Macintosh Applications	
Scope 2: Broad Comprehension of the Development of Knowledge, Practice and Interpretation		
Humanities & Fine Arts (Choose one course from the following to meet the required 3-4 credits)*		
Course #	Course Name	Credits
ASL 100	American Sign Language I	4
CH 110	Chamorro I	4
ED 265	Culture & Education in Guam	3
CO 125	Introduction to Human Communication and Speech	3
EN 210	Introduction to Literature	3
HI 121	World Civilization (Pre-historic Time to 1500)	3
HI 122	World Civilization (1500 to Present Time)	3
HI 176	Guam History	3
HM 110	Introduction to Community Services	3
HM 201	Social Welfare & Development	3
HU 120	Pacific Cultures	3
HU 220	Guam Cultures & Legends	3
JA 110	Japanese I	4
KE 110	Korean I	4
PI 101	Introduction to Philosophy	3
TH 101	Introduction to the Theater	3
VC 101	Introduction to Visual Communications	3
*Any foreign language, humanities, or fine arts course will be considered for the completion of this category		
Natural & Physical Sciences (Choose one course and the corresponding lab from the following to meet the required 4 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)	
SI 105/105L	Introduction to Physical Geology (3)	

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SI 110/110L	& Introduction to Physical Geology Laboratory (1) Environmental Biology (3) & Environmental Biology Laboratory (1)
SI 141	Applied Physics I
SI 150/150L	Introduction to Microbiology (3) & Introduction to Microbiology Laboratory (1)
SI131/131L	Human Anatomy & Physiology I (3) & Human Anatomy & Physiology I Laboratory (1)
SI132/132L	Human Anatomy & Physiology II (3) & Human Anatomy & Physiology II Laboratory (1)

**The exception to this would be SI141 which does not include a laboratory requirement

Scope 3: Preparation for and Acceptance of Responsible Participation in Civil Society

Social & Behavioral Sciences (Choose one course from the following to meet the required 3 credits)

Course #	Course Name	Credits
EC 110	Principles of Economics	3
PS140	American Government	3
PY 100	Personal Adjustment	3
PY 120	General Psychology	3
PY 125	Interpersonal Relations	3
SO 130	Introduction to Sociology	3
CJ 100	Introduction to Criminal Justice	3
WG 101	Introduction to Women and Gender Studies	3

*Any social and behavioral science course will be considered for the completion of this category

Minimum General Education Requirements 19

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SUGGESTED SEQUENCE OF COURSES

This suggested sequence of courses is based on the 2020-2021 College Catalog.

Year 1			Year 2		
Semester 1			Semester 2		
Course	Course Name	Credits	Course	Course Name	Credits
AE103	Basic Blueprint Reading	3	AE122	Technical Engineering Drawing II	3
AE121	Technical Engineering Drawing I	3	AE138	Building Codes, Specifications & Construction Management	3
CS101	Introduction to Computer Systems & Information Technology	3	AE150	Computer Aided Drafting I (CAD I)	3
CE215	Construction Procedures	3	CE121	Properties of Materials	3
SO130	Introduction to Sociology	3	MA161A	College Algebra & Trigonometry I	4
EN__	English Requirement	3-4			

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18-19			19-20		
Semester 3			Semester 4		
Course	Course Name	Credits	Course	Course Name	Credits
AE160	Computer Aided Drafting II (CAD II)	3	AE216/ AE170	Descriptive Geometry OR Revit Architecture Essentials	3
CE225	Construction Planning & Estimating	3	CE221	Strength of Materials	3
PY120	General Psychology	3	EN194	Technical Communication	3
MA161B	College Algebra & Trigonometry II	4	CS151	Windows Applications	3
OR101	Introduction to Engineering Technology	3	SI141	Applied Physics I	4
Total		16-17	Total		16
Year 1 Total		34-35	Year 2 Total		32-33
Program Total					66-67

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Student Learning Outcomes

Upon successful completion of the AS in Pre-Architectural Drafting program, students will be able to:

1. Demonstrate knowledge and skills needed to design and draft projects ranging from two to three dimensional designs for commercial and residential buildings.
2. Demonstrate basic skills needed to view, print, edit, and create variations of two and three dimensional electronic designs.
3. Develop a professional work ethic needed in the architectural engineering industry.
4. Create an electronic portfolio that represents proficiency in the development of two and three dimensional computer aided designs.

Success Stories



[Abhay Godhania](#) [1]

Major: Associate of Science in Pre-Architectural Drafting and a Certificate in Computer-Aided Design & Drafting (CADD).

"GCC prepared me technically through writing and math. The classes cover the right amount of material that I can take with me. My advisor and the faculty at GCC are supportive and have always kept in touch even after graduating from Oklahoma State University in 2019. I now work as an engineer in Oklahoma City."

Check out some of these amazing Associate of Science in Pre-Architectural Drafting courses...

CE215 Construction Procedures

A study of construction organization, building codes, foundations, construction materials, methods and techniques of cast-in-place reinforced concrete, precast and pre-stressed concrete, steel and masonry construction, wood and plastics, thermal and moisture protection and building equipment.

[+ More Info](#) [2]

CE225 Construction Planning & Estimating

This course covers methods of estimating construction costs including excavation, highway, structures, piling and foundations; methods to determine qualities of materials, equipment, labor, and money required for construction projects; characteristics and capabilities of work equipment; methods of obtaining unit cost of in place construction; and field reporting practices and responsibilities of field inspection.

[+ More Info](#) [3]

AE160 Comp Aided Design & Draft II

This course builds on the topics covered in AE150 and presents intermediate editing techniques. This course covers the fundamentals of how to utilize Computer Aided Design and Drafting (CADD) to create and manage a set of construction documents for a single building project. Students will gain knowledge and practical experience leading to entry-level jobs by performing many of the duties of an architectural or engineering CADD operator.

[+ More Info](#) [4]

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



[5]

[Certificate in Computer Aided Design & Drafting \(CADD\)](#) [5]

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](#) [5]



[6]

[Associate of Science in Surveying Technology](#) [6]

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](#) [6]



[7]

[Associate of Science in Civil Engineering Technology](#) [7]

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.

[+ More Info](#) [7]