

Associate of Science in Pre-Architectural Drafting

Program Description

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 selected in Guam's Career & Technical Education Five-Year State Plan.

Program Student Learning Outcomes (SLOs):

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.

| General Education Requirements | | |
|--------------------------------|--|--------------|
| Course # | Course Name | Credits |
| EN 194 | Technical Communication | 3 |
| MA161A | College Algebra & Trigonometry I | 4 |
| CSXX | Computer Literacy Requirement | 3 |
| XXXXX | Humanities & Fine Arts Requirement | 3-4 |
| SI141 | Applied Physics I | 4 |
| XXXXX | Social & Behavioral Sciences Requirement | 3 |
| Total | | 20-21 |
| Technical Requirements | | |
| Course # | Course Name | Credits |
| AE 103 | Basic Blueprint Reading | 3 |
| AE 121 | Technical Engineering Drawing I | 3 |
| AE 122 | Technical Engineering Drawing II | 3 |
| AE 138 | Building Codes, Specifications & Construction Management | 3 |
| AE 150 | Computer Aided Design & Drafting (CADD) I | 3 |

| AE 160 | Computer Aided Design & Drafting (CADD) II | 4 |
|--|---|--------------|
| AE 216 | Descriptive Geometry | 3 |
| Related General Education & Technical Requirements | | |
| Course # | Course Name | Credits |
| CE 121 | Properties of Materials | 3 |
| CE 215 | Construction Procedures | 3 |
| CE 221 | Strength of Materials | 3 |
| CE 225 | Construction Planning & Estimating | 3 |
| CS 101 | Introduction to Computer Systems & Information Technology | 3 |
| OR 101 | Introduction to Engineering Technology | 3 |
| MA 161B | College Algebra & Trigonometry I | 4 |
| Total | | 44 |
| Program Total | | 64-65 |

Associate of Science in Pre-Architectural Drafting – Semester Breakdown

| Year 1 | | | Year 2 | | |
|----------------------|---|-----------|---------------------|--|--------------|
| Semester 1 | | | Semester 3 | | |
| Course # | Course Name | Credits | Course # | Course Name | Credits |
| AE 103 | Basic Blueprint Reading | 3 | AE 160 | Computer Aided Design & Drafting (CADD) II | 4 |
| AE 121 | Technical Engineering Drawing I | 3 | CE 225 | Construction Planning & Estimating | 3 |
| CS 101 | Introduction to Computer Systems & Information Technology | 3 | XXXXX | Humanities & Fine Arts Requirement | 3-4 |
| CE 215 | Construction Procedures | 3 | MA 161B | College Algebra & Trigonometry I | 4 |
| XXXXX | Social & Behavioral Sciences Requirement | 3 | OR 101 | Introduction to Engineering Technology | 3 |
| Total | | 15 | Total | | 17-18 |
| Semester 2 | | | Semester 4 | | |
| Course # | Course Name | Credits | Course # | Course Name | Credits |
| AE 122 | Technical Engineering Drawing II | 3 | AE 216 | Descriptive Geometry | 3 |
| AE 138 | Building Codes, Specifications & Construction Management | 3 | CE 221 | Strength of Materials | 3 |
| AE 150 | Computer Aided Design & Drafting (CADD) I | 3 | EN 194 | Technical Communication | 3 |
| CE 121 | Properties of Materials | 3 | CSXXX | Computer Literacy Requirement | 3 |
| MA161A | College Algebra & Trigonometry I | 4 | SI141 | Applied Physics I | 4 |
| Total | | 16 | Total | | 16 |
| Year 1 Total | | 31 | Year 2 Total | | 33-34 |
| Program Total | | | | 64-65 | |