



# Airframe Manufacturing Technology B. S. 17-18

## COUNSELING CENTER ADVISING Minimum Eligibility Requirements for Applicants:

1. Completion of the Aircraft Fabrication & Assembly Technician (AFAB) associate degree/course sequence or noted equivalent Aeronautical and Aviation Technology courses and AFAB 130 and AFAB 210.

2. Completion of the general education requirements for the CSU system:

	<b>units</b>
CSU GE Area A1, COMM 101	3
CSU GE Area A2, ENGL 101 or ENGL 101SL	3
CSU GE Area A3, Critical Thinking	3
CSU GE Area B1, CHEM 101	5
CSU GE Area B2, BIOL 304	3
CSU GE Area B4, MATH 135	3
CSU GE Area C1, Arts	3
CSU GE Area C2, Humanities	3-5
CSU GE Area C1 or C2	3-5
CSU GE Area D, PSY 101	3
CSU GE Area D, POLS 101	3
CSU GE Area D, HIST 107 or 108 or 110 or 111	3
CSU GE Area E, Lifelong Learning & Self-Development	3

**NOTE:** Denoted courses above fulfill both the major and the general education requirements. For assistance, contact the counseling department.

3. Students must have a 2.8 minimum GPA in all AFAB/AERO courses and a 2.5 minimum GPA in all college classes taken for credit (overall GPA).

**NOTE:** The aerospace industries generally require employment applicants to pass a background check and drug screening. Employment is often subject to the applicant's ability to receive a security clearance from the Department of Defense (DoD).

### Screening Procedures:

Application packets are accepted during the designated application period only. Students who meet the minimum requirements of the program will be randomly selected for enrollment. Students who have not completed 2-3 baccalaureate prerequisite courses or are currently in the process of completing them are encouraged to apply for admission. Students will be advised of acceptance or non-acceptance by mail. **INCOMPLETE PACKETS WILL NOT BE CONSIDERED.**

### Program Prerequisites:

	<b>units</b>
AFAB 110, Introduction to Aircraft Structures, Blueprint and Manufacturing Documentation or AERO 121, Aircraft General II	3-7.5
AFAB 115, Aircraft Structures and AFAB 120, Composite Fabrication and Repair or AERO 230, Airframe I	15
AFAB 130, Aerospace Ethics and Issues	4
AFAB 210, Aircraft Production Systems	4
CHEM 101, Introductory Chemistry	5
COMM 101, Introduction to Public Speaking	3
ENGL 101, Academic Composition or ENGL 101SL, Academic Composition for ESL	3
ENGL 115, Introduction to Technical Communication	3
PSY 101, General Psychology	3
PHYS 101, Introductory Physics	4
MATH 135, Plane Trigonometry	3
<b>Total Units</b>	<b>50</b>

The Airframe Manufacturing Technology baccalaureate degree builds off of two existing high quality, successful programs that have provided well trained employees to meet the needs in our communities for many years. By expanding these programs to include the opportunity to earn a baccalaureate degree, Antelope Valley College will now fill the need of local employers for a highly skilled lead worker in the same field and will provide a valuable opportunity for both our students and our community.

The Airframe Manufacturing Technology program will include courses in disciplines in which Antelope Valley College already offers degrees and certificates: Aircraft Fabrication and Assembly and Aviation Airframe.

Students must receive a minimum grade of "C" or better in all required core courses and the specific courses listed as program electives in order to qualify for the degree or certificate.

### Major Required Courses

	<b>units</b>
AFAB 130, Aerospace Ethics and Issues	4
AFAB 110, Introduction to Aircraft Structures, Blueprint and Manufacturing Documentation or AERO 121, Aircraft General II	3-7.5
AFAB 115, Aircraft Structures and AFAB 120, Composite Fabrication and Repair or AERO 230, Airframe I	15
AFAB 210, Aircraft Production Systems	4
AFMT 310, Safety in Aviation	3
AFMT 320, Lean Management (Six Sigma & 5S)	3
AFMT 330, Airframe Manufacturing Productibility	3
AFMT 340, Theory of Low Observables	3
AFMT 341, Manufacturing Testing & Inspection	6
AFMT 345, Airframe Composite Manufacturing I	6
AFMT 350, Airframe Manufacturing Capstone I	2
AFMT 442, Foreign Object Elimination (FOE) and Migration Paths	3
AFMT 446, Airframe Composite Manufacturing II	6
AFMT 451, Airframe Manufacturing Capstone II	4
BIOL 304, A Survey of Emerging and Re-emerging Infectious Diseases (CSU GE Area B2)	3
CHEM 101, Introductory Chemistry (CSU GE Area B1)	5
COMM 101, Introduction to Public Speaking (CSU GE Area A1)	3
ELTE 105, Introduction to Robotics	3
ENGL 101, Academic Composition or ENGL 101SL, Academic Composition for ESL (CSU GE Area A2)	3
ENGL 115, Introduction to Technical Writing	3
ENGL 315, Applied Technical Writing (Upper Division GE)	3
ENGR 140, Engineering 3-D Graphics	3
HIST 107, US History, 1607-1877 or HIST 108, US History, 1607-1877 or HIST 110, African American History, 1450-1877 or HIST 111, African American History, 1877-Present (CSU GE Area D)	3
MATH 135, Plane Trigonometry (CSU GE Area B4)	3
PHYS 101, Introductory Physics	4
POLS 101, American Political Institutions (CSU GE Area D)	3
PSCI 302, Introduction to Quantitative Atmospheric Dynamics and Thermodynamics (Upper Division GE)	3
PSY 101, General Psychology (CSU GE Area D)	3
PSY 301, Organizational Behavioral Psychology (Upper Division GE)	3
CSU GE Area E, Lifelong Learning & Self-Dev.	3
CSU GE Area A3, Critical Thinking	3
CSU GE Area C1, C2, C1/C2	9

- Refer to catalog or online website for course listings, descriptions, and suggested course sequence if available

### Enrollment Procedures:

Refer to announcements on the AVC website for updated enrollment information. All items in the enrollment process are extremely important. Students who omit any part of the required information or miss the deadline will be dropped from consideration for the Airframe Manufacturing Technology Program. Only official documents will be accepted. Faxed documents are not official and are not accepted.

1. Submit the completed Application for Enrollment packet by mail or walk-in by the deadline. **NOTE:** You are responsible for notifying the Career Technical Education Division office when you change your address or telephone number. Please call 661-722-6300, extension 6327, to do this.
2. Attach unopened official college transcripts (including Antelope Valley College) that show completion of the prerequisite courses. One set of college transcripts must also be on file in the Admissions and Records Office. **NOTE:** "Official" college transcripts must be submitted in sealed envelopes that have not been opened by the student.
3. Attach a copy of the Educational Planning and Evaluation Form completed by an AVC counselor. Call 661-722-6300, extension 6338, to schedule an appointment with the appropriate BS degree counselor. Be sure you inform the information desk that you are requesting an appointment regarding the BS Degree. The form should be completed no more than one semester prior to submitting the application packet. All students must see an AVC counselor before they submit an admission packet. Counselors complete Educational Planning and Evaluation Forms by appointment only.
4. Submit the items listed in numbers 1 through 3 to the Career Technical Education Division office (TE7-129, Technology Building). Please call the division office at (661) 722-6300 ext. 6327 for drop off hours. Application packets may also be mailed.

To contact the Technical Education Division, please call: 661-722-6300 ext. 6327

**Double Counting:** While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a general education requirement and a major or area of emphasis requirement.

The "Catalog Rights Policy" sets forth the criteria used for determining the degree requirements under which students may graduate. Please refer to the AVC Catalog for a detailed description or consult with a counselor. **Antelope Valley College's website:** [www.avc.edu](http://www.avc.edu)

### Prerequisite Completion

If a course is listed as a prerequisite for another course, that prerequisite course must be completed with a satisfactory grade in order to enroll in the next course. According to Title 5, Section 55200(d), a satisfactory grade is a grade of "A," "B," "C" or "P". Students who enroll in classes for which they do not meet the prerequisites will be involuntarily dropped. Students will be notified of this involuntary drop.

#### CHEM 101, INTRODUCTORY CHEMISTRY

**Prerequisite:** Completion of MATH 102 or higher.  
*Advisory:* Eligibility for College Level Reading and ENGL 099.  
(CSU, UC, AVC)

#### COMM 101 \*INTRODUCTION TO PUBLIC SPEAKING

*Advisory:* Eligibility for ENGL 101/ENGL  
(CSU, UC, AVC)

#### ENGL 101 \*ACADEMIC COMPOSITION

**Prerequisite:** Eligibility for ENGL 101/ENGL 101SL (AVC assessment) or Completion of ENGL 099, or Eligibility for ENGL 099 (AVC assessment) and Completion of ENGL 090, ENGL 100A, ENGL 100R, and ENGL 100C.  
*Advisory:* Eligibility for READ 099.  
(CSU, UC, AVC)

#### ENGL 101SL \*ACADEMIC COMPOSITION FOR ESL

**Prerequisite:** Completion of ESL 099.  
(CSU, UC, AVC)

#### ENGL 115 INTRODUCTION TO TECHNICAL COMMUNICATION

**Prerequisite:** Completion of ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

#### PSY 101 \*GENERAL PSYCHOLOGY

*Advisory:* Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

#### PHYS 101 INTRODUCTORY PHYSICS

*Advisory:* Completion of MATH 135 or MATH 140, and Eligibility for College Level Reading and ENGL 101/ENGL101SL.  
(CSU, UC, AVC)

#### MATH 135 \*PLANE TRIGONOMETRY

**Prerequisite:** Eligibility for MATH 135 (AVC Assessment) or Completion of MATH 102,  
*Advisory:* Concurrent enrollment in MATH 105, Eligibility of ENGL 101/ENGL 101SL and College Level Reading.  
(CSU, UC, AVC)

#### AFAB 110 \*INTRODUCTION TO AIRCRAFT STRUCTURES, BLUEPRINT AND MANUFACTURING DOCUMENTATION

*Advisory:* Eligibility for ENGL 099, READ 099 and MATH 070.  
(AVC)

Or

#### AERO 121 \*AIRCRAFT GENERAL II

*Advisory:* Eligibility for ENGL 099, READ 099 and MATH 070.  
(AVC)

#### AFAB 115 \*AIRCRAFT STRUCTURES

**Prerequisite:** Completion of or concurrent enrollment in AFAB 110.  
*Advisory:* Eligibility for ENGL 099, READ 099 and MATH 070.  
(AVC)

#### AFAB 120 \*COMPOSITES FABRICATION AND REPAIR

**Prerequisite:** Completion of or concurrent enrollment in AFAB 110.  
*Advisory:* Eligibility for ENGL 099, READ 099 and MATH 070.  
(AVC)

Or

#### AERO 230 \*AIRCRAFT AIRFRAME I

*Advisory:* Eligibility for ENGL 099, READ 099 and MATH 070.  
(AVC)

#### AFAB 130 \*AEROSPACE ETHICS AND ISSUES

*Advisory:* Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

#### AFAB 210 \*AIRCRAFT PRODUCTION SYSTEMS

**Prerequisite:** Completion of AERO 230 or AFAB 115.  
*Advisory:* Eligibility for College Level Reading, ENGL 101/ENGL 101SL and MATH 070.  
(AVC)

#### AFMT 310 SAFETY IN AVIATION

**Prerequisite:** Completion of AFAB 130, AFAB 210, ENGL 315, and PSY 301.  
(AVC)

#### AFMT 320 LEAN MANAGEMENT (SIX SIGMA & 5S)

**Prerequisite:** Completion of AFAB 210, ENGL 315, and PSY 301.  
**Corequisite:** Concurrent enrollment in AFMT 330.  
(AVC)

#### AFMT 330 AIRFRAME MANUFACTURING PRODUCIBILITY

**Prerequisite:** Completion of AFAB 210, ENGL 315, and PSY 301.  
**Corequisite:** Concurrent enrollment in AFMT 320.  
(AVC)

#### AFMT 340 THEORY OF LOW OBSERVABLES

**Prerequisite:** Completion of AFAB 120, CHEM 101, and PHYS 101.  
(AVC)

#### AFMT 341 MANUFACTURING TESTING & INSPECTION

**Prerequisite:** Completion of AFMT 310.  
(AVC)

#### AFMT 345 AIRFRAME COMPOSITE MANUFACTURING I

**Prerequisite:** Completion of AFAB 120 and AFMT 310.  
(AVC)

#### AFMT 350 AIRFRAME MANUFACTURING CAPSTONE I

**Prerequisite:** Completion of AFMT 310, AFMT 320, and AFMT 330.  
(AVC)

#### AFMT 442 FOREIGN OBJECT ELIMINATION (FOE) AND MIGRATION PATHS

**Prerequisite:** Completion of AFMT 330.  
(AVC)

#### AFMT 446 AIRFRAME COMPOSITE MANUFACTURING II

**Prerequisite:** Completion of AFMT 345.  
(AVC)

#### AFMT 451 AIRFRAME MANUFACTURING CAPSTONE II

**Prerequisite:** Completion of AFMT 350.  
(AVC)

#### BIOL 304 A SURVEY OF EMERGING AND REEMERGING INFECTIOUS DISEASES

**Prerequisite:** Completion of ENGL 101/ENGL 101SL.  
(AVC)

#### ELTE 105 \*INTRODUCTION TO ROBOTICS

*Advisory:* Eligibility for ENGL 099, READ 099 and MATH 070.  
(AVC)

#### ENGL 315 APPLIED TECHNICAL WRITING

**Prerequisite:** Completion of ENGL 115.  
(AVC)

#### ENGR 140 ENGINEERING 3D GRAPHICS

**Prerequisite:** Completion of MATH 135 (AVC Assessment).  
(CSU, UC, AVC)

#### HIST 107 U.S. HISTORY, 1607 – 1877

*Advisory:* Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

Or

#### HIST 108 U.S. HISTORY FROM 1865

*Advisory:* Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

Or

#### HIST 110 AFRICAN AMERICAN HISTORY, 1450 – 1877

*Advisory:* Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

Or

#### HIST 111 AFRICAN AMERICAN HISTORY, 1877 – PRESENT

*Advisory:* Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

#### POLS 101 AMERICAN POLITICAL INSTITUTIONS

*Advisory:* Eligibility for College Level Reading and ENGL 101/ENGL 101SL.  
(CSU, UC, AVC)

#### PSCI 302 INTRODUCTION TO QUANTITATIVE ATMOSPHERIC DYNAMICS AND THERMODYNAMICS

**Prerequisite:** Completion of MATH 135 and PHYS 101.  
(AVC)

#### PSY 301 ORGANIZATIONAL BEHAVIORAL PSYCHOLOGY

**Prerequisite:** Completion of PSY 101.  
(AVC)

#### *Advisory:*

A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

#### **Prerequisite:**

A condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. Prerequisites are enforced and a student will be blocked from enrolling or involuntarily dropped after enrolling if the student does not meet the stated prerequisite. A student must complete a course prerequisite with a satisfactory grade of A, B, C or P (pass).

#### Corequisite:

A condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course. Corequisites are enforced and a student will be blocked from enrolling if the student does not meet the stated requisite.