

# AVIATION (AVA)

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## **AVA 01 Studies in Aircraft Maintenance Technology (0.0 Units)**

Studies in Aircraft Maintenance ce Technology course serves as the remedial course designed to allow aviation students an opportunity to reconcile missed lecture and lab assignments and hours required by the current VVC SCLA Operations Manual and CFR 14 FAR 147 App. A,B,C,D. Lecture Hours: 30.0; Lab Hours: 32.0  
Transfer: Not transferable

## **AVA 50 Aviation Technology Survey (4.0 Units)**

This course is designed to allow interested students the ability to explore aviation maintenance career pathways. This course will focus on principles and practices of modern aircraft maintenance technology. Lecture Hours: 54.0; Lab Hours: 54.0  
Transfer: Not transferable

## **AVA 50B Aircraft Metallic Fabrication (4.0 Units)**

This course will provide students with the techniques and procedures necessary for fabricating metallic aircraft structures. Upon completion of this course students will will have practical knowledge and skill sets in the following areas: Types of aircraft structures and applications. Setting up - using sheet metal shop equipment (Box Brakes - Shears - Slip Formers etc). Reading and applying Metal - Composite Blueprints. Sheet Metal Fabrication practices - Drilling operations. Aircraft Fastener installation - removal practices. Prerequisite(s): AVA 50, Minimum grade C  
Lecture Hours: 54.0; Lab Hours: 54.0  
Transfer: Not transferable

## **AVA 51 General Aviation I (9.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include math, basic electricity, basic physics, fluid lines and fittings and materials and processes. Lecture Hours: 135.0; Lab Hours: 108.0  
Transfer: Not transferable

## **AVA 52 General Aviation 2 (9.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include maintenance and ground operations. Prerequisite(s): AVA 51, Minimum grade C  
Lecture Hours: 135.0; Lab Hours: 108.0  
Transfer: Not transferable

## **AVA 61 Airframe 1 (10.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include aircraft materials, coverings and finishes, inspection, assembly and rigging and welding. Prerequisite(s): (AVA 51 ) and (and AVA 52, Minimum Grade C)  
Lecture Hours: 144.0; Lab Hours: 135.0  
Transfer: Not transferable

## **AVA 62 Airframe 2 (10.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include aircraft electrical, positioning,warning, ice, rain control, and fire protection systems. Prerequisite(s): (AVA 51 ) and (AVA 52, Minimum grade C)  
Lecture Hours: 144.0; Lab Hours: 135.0  
Transfer: Not transferable

## **AVA 63 Airframe 3 (10.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topic includes safety systems, aircraft electrical systems, positioning and warning systems, ice and rain control systems, and fire protection systems. Prerequisite(s): (AVA 51) and (AVA 52, Minimum grade C)  
Lecture Hours: 144.0; Lab Hours: 135.0  
Transfer: Not transferable

## **AVA 71 Powerplant 1 (10.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include reciprocating engines, turbine engines, and engine inspection. Prerequisite(s): (AVA 51) and (AVA 52, Minimum grade C)  
Lecture Hours: 144.0; Lab Hours: 135.0  
Transfer: Not transferable

## **AVA 72 Powerplant 2 (10.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include induction and engine airflow systems, engine exhaust and reverser systems, and propellers. Prerequisite(s): (AVA 51) and (AVA 52, Minimum grade C)  
Lecture Hours: 144.0; Lab Hours: 135.0  
Transfer: Not transferable

## **AVA 73 Powerplant 3 (10.5 Units)**

This course is designed to prepare students for a career in aviation maintenance technology. Topics include instrument, electrical, ignition, starting, and fuel systems. Prerequisite(s): (AVA 51 ) and (AVA 52, Minimum grade C)  
Lecture Hours: 144.0; Lab Hours: 135.0  
Transfer: Not transferable

## **AVA 74 Aviation Technology Capstone Course (4.0 Units)**

This course is designed to prepare students for FAA licensure testing. Topics include a review of general, airframe, and power plant curricula. Lecture Hours: 54.0; Lab Hours: 54.0  
Transfer: Not transferable

## **AVA 75 Composites 1 Introduction to Composites (4.0 Units)**

Introduction into Advanced Aerospace Composite Manufacturing and Repair Processes. This introductory course instructs students how to understand the practical applications of composite materials. Prerequisite(s): AVA 50B, Minimum grade C  
Lecture Hours: 54.0; Lab Hours: 54.0  
Transfer: Not transferable

## **AVA 76 Composites 2 Advanced Composite Repair (3.5 Units)**

This course will explore practices and techniques employed in advanced composite repair practices. This course covers how to make repairs to composite structures and adhesive bonding. Upon completion of Composite 2 students will have knowledge and skills in advanced composite repair practices and techniques. Prerequisite(s): AVA 75, Minimum grade C  
Lecture Hours: 27.0; Lab Hours: 108.0  
Transfer: Not transferable

**AVA 77 Composites 3 Manufacturing Process for Advanced Composites (6.0 Units)**

Composites 3 Manufacturing Processes for Advanced Composites will explore techniques and applications applicable to manufacturing advanced composites including composite design criteria and in use applications, bonding techniques, composite tool making and machining and processing advanced composites.

Prerequisite(s): AVA 76, Minimum grade C

Lecture Hours: 54.0; Lab Hours: 162.0

Transfer: Not transferable

**AVA 138 Work Experience Education Aviation (1-8 Units)**

Work Experience Education is a key element of Victor Valley College's comprehensive approach to career development. Work Experience Education is a 16-, 12-, or 8-week course that enables students to receive college credit for paid or unpaid work opportunities. This course helps students gain valuable on-the-job work experience while providing practical education, best practices in professional development, and academic guidance through the course of their work opportunity.

The combination of practical experience and curricular development empowers students to be more competitive, efficient and valuable employees upon completion of this program and/or their academic program trajectory. The course is ideal for students who are cross-training at their current worksite for upward mobility or seeking career changes, as well as those looking for entry-level occupational training through work-based learning experiences such as through an internship.

Work Experience Education transforms community businesses, industries, and public agencies into expanded educational training laboratories. Credit is awarded on the basis of learning objectives completed and the number of hours the student trains. Students must create/complete new learning objectives each semester they enroll. Students may utilize their present work sites. More details are available in the Work Experience Education Office, (760) 245-4271, ext. 2281. The office, located in the Academic Commons, is open Monday-Thursday, 8:00 a.m.-1:00 p.m., 2:00-6:00 p.m., and by appointment. Please refer to the Work Experience Education section in this catalog for more information.

CSU

Transfer: Transfers to CSU only