

# FLIGHT OPERATIONS AND MANAGEMENT ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in Flight Operations and Management students must complete the following requirements with a grade of C or better plus the general breadth requirements for the Associate Degree (minimum total = 60 units). This degree is for students who are interested in a career as a commercial pilot either in general aviation, the airlines, or in the area of aviation management.

Code	Title	Units
<b>Required Courses:</b>		
AERO 021	Aviation Fundamentals	3
AERO 022	Private Pilot Ground School <sup>1</sup>	6
AERO 024	Aircraft Powerplants	3
AERO 025	Flight Safety	2
AERO 026	Airframe Structures	3
AERO 027	Airport Certification and Operations	2
AERO 034	Civil Aviation Management and Laws	3
AERO 040	Instrument Ground School	4
AERO 046	Aviation Weather	3
<b>Total Units</b>		<b>29</b>

Code	Title	Units
<b>Recommended Courses:</b>		
AERO 022L	Private Pilot Flight Lab	1
AERO 041L	Instrument Pilot Flight Lab	1
AERO 070	Introduction to Air Traffic Control (ATC)	3
AERO 071	Civil Aircraft Recognition and Performance	2

<sup>1</sup> AERO 022 may be waived if students have taken an equivalent course; students are encouraged to see the Department Chair to determine whether course is equivalent to AERO 022.

To earn an SBVC Associate Degree students must complete one of the following general education patterns:

SBVC GE requirements (<https://www.valleycollege.edu/student-services/counseling/graduation-requirements/>)

CSU GE requirements (<https://www.valleycollege.edu/student-services/counseling/csuge/>)

IGETC requirements (<https://www.valleycollege.edu/student-services/counseling/igetc/>)

## Program Learning Outcomes

At the completion of this program, students will be able to:

- Relate the basic principles of aircraft flight, airport layout, airplane construction, and types of airspace.
- Relate the major aircraft structural components, and the aircraft systems and components and their relevance to aircraft operation.
- Discuss the factors involved in aircraft flight safety.

- Compare the different types of aircraft powerplants and discuss the advantages and disadvantages of each.
- Decipher the different types of weather reports and forecast and determine if aircraft flight is safe.
- Explain the basic principles of aircraft flight.
- Outline how the different types of weather affect aircraft flight safety.
- Explain the relevance of Federal Regulations and laws to aircraft flight safety.
  - Contrast the differences in requirements between general aviation, air carriers, and the air cargo industry.
- Examine the different business aspects involved in aviation management.