## AVIONICS TECHNOLOGY ASSOCIATE OF SCIENCE DEGREE

To graduate with a specialization in Avionics Technology, students must complete all requirements for the certificate with a grade of C or better plus the general breadth requirements for the Associate Degree (minimum total = 60 units).

| Code              | Title   | Units |
|-------------------|---|-------|
| Required Courses: |   |       |
| TECALC 087        | Technical Calculations                              | 4     |
| ELECTR 110        | Direct Current Circuit Analysis                     | 3     |
| ELECTR 111        | Direct Current Circuit Laboratory                   | 1     |
| ELECTR 115        | Alternating Current Circuit Analysis                | 3     |
| ELECTR 116        | Alternating Current Circuit Laboratory              | 1     |
| ELECTR 155        | Electronic Drawing and Assembly                     | 3     |
| ELECTR 230        | Semiconductor Devices                               | 3     |
| ELECTR 235        | Solid State Circuit Analysis                        | 4     |
| ELECTR 265        | Digital Logic Design                                | 4     |
| ELECTR 266        | Microprocessor Technology with Assembly<br>Language | 4     |
| ELECTR 270        | Linear Integrated Circuit Analysis                  | 4     |
| AERO 021          | Aviation Fundamentals <sup>1</sup>                  | 3     |
| AERO 040          | Instrument Ground School                            | 4     |
| ELECTR 220C       | FCC Rules and Regulations                           | 3     |
| ELECTR 250C       | Radio Transmitters, Receivers and Antennas          | 4     |
| ELECTR 257C       | Navigation and Communication Systems                | 4     |
| Total Units       |   | 52    |

<sup>&</sup>lt;sup>1</sup> AERO 052 & AERO 053 can be substituted for AERO 021 & AERO 040

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:

- a. Be prepared to transfer a core curriculum to an accredited, 4-year college or university with junior class standing in electronics technology or a related major.
- Select and operate electronic test equipment during troubleshooting and repair operations, with an emphasis on safety in use and accuracy in results.
- c. Analyze, interpret, and trace digital logic diagrams used in signal tracing of complex navigational and airborne communications circuits.

- d. Effectively communicate with and advise customers and co-workers, both written and orally, regarding the progress of and decisions made concerning test and repair procedures.
- e. Sit for industry/Federal-style examinations on the theory and procedures of avionics technology.