

# AVIONICS TECHNOLOGY CERTIFICATE OF ACHIEVEMENT

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This certificate is designed to provide students with the fundamentals of electronics technology as it applies to avionics. The curriculum prepares students for entry-level positions in aircraft electricity, maintenance, installation, field service, networking, and apprenticeship in the field of avionics technology.

Code	Title	Units
<b>Required Courses</b>		
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 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	F.C.C. Rules and Regulations	3
ELECTR 250C	Radio Transmitters, Receivers and Antennas	4
ELECTR 257C	Navigation and Communication Systems	4
<b>Total Units</b>		<b>52</b>

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

*This is a Gainful Employment Program*

## Program Learning Outcomes

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

- 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
- Analyze, interpret, and trace digital logic diagrams used in signal tracing of complex navigational and airborne communications circuits
- 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
- Sit for industry/Federal-style examinations on the theory and procedures of avionics technology