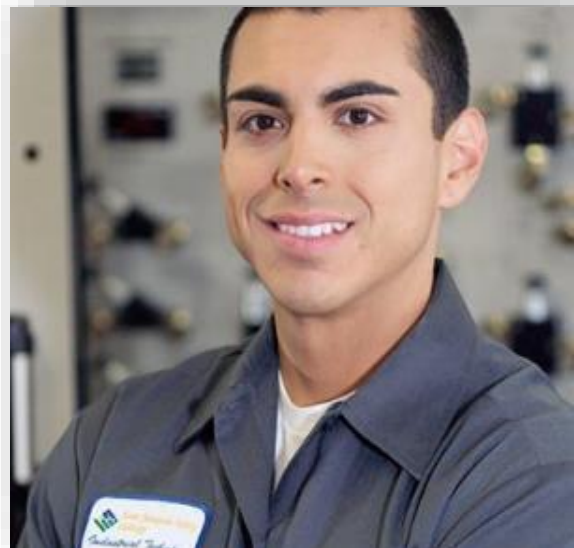




SAN JOAQUIN VALLEY COLLEGE

**SUPPLEMENT TO THE
2024 COLLEGE
CATALOG
(rev. 10.24.24)**



AMTA 220: Aircraft Systems I

5.0 Units 120 Hours

Prerequisite(s): None

This course provides a focused exploration of landing gear systems, hydraulic and pneumatic systems, environmental systems, and ice and rain control systems. Students will study landing gear mechanics, understanding of hydraulic and pneumatic components, an examination of environmental systems for air quality control, and practical training in ice and rain control systems. The integration of these topics equips students with a robust understanding of key aviation maintenance areas. **A grade of "C" or higher is required to pass this course.**

AMTA 230: Aircraft Systems II

5.0 Units 120 Hours

Prerequisite(s): None

This course offers a focused exploration of aircraft instrument systems and communication and navigation systems, providing insights into flight control and communication technology. The study of aircraft fuel systems and aircraft electrical systems equips students with an understanding of energy efficiency and safety in aircraft operation. Additionally, the course delves into airframe fire protection systems, teaching essential safety protocols, and covers water and waste systems, promoting responsible resource management. **A grade of "C" or higher is required to pass this course.**

AMTP 240: Turbine Engines

5.0 Units 120 Hours

Prerequisite(s): None

This course focuses on turbine engines, emphasizing their design and operational principles. Engine inspection is emphasized, emphasizing the importance of FAA compliance and detailed record-keeping. Students will engage with the components and principles of turbine engine air systems, particularly their cooling and induction mechanisms. Engine exhaust and reverser systems will be covered showing the unique attributes of reverser systems in both reciprocating and turbine engines. **A grade of "C" or higher is required to pass this course.**

AMTP 250: Reciprocating Engines

5.0 Units 120 Hours

Prerequisite(s): None

This course focuses on core components driving aviation mechanics and performance. Students will learn the intricacies of reciprocating engines, revealing their operating principles and maintenance nuances and engine instrument systems come into focus, highlighting the critical role of real-time data and system monitoring. The dynamics of propellers, exploring their design, functionality, and pivotal role in aircraft propulsion is also covered. **A grade of "C" or higher is required to pass this course.**

AMTP 260: Aircraft Auxiliary Systems I

5.0 Units 120 Hours

Prerequisite(s): None

This course focuses on the safety and operational mechanics behind aircraft engine systems. This course offers insights into engine fire protection systems, ensuring rapid response during critical situations, and engine lubrication systems, focusing on the optimization of friction reduction and component longevity. Students navigate the intricacies of engine fuel and fuel metering systems, promoting optimal combustion and energy conversion. **A grade of "C" or higher is required to pass this course.**

AMTP 270: Aircraft Auxiliary Systems II

5.0 Units 120 Hours

Prerequisite(s): None

This course focuses on the integral systems that power and regulate aircraft engines. Students will explore engine electrical systems, understanding the components crucial for consistent energy distribution and learn the mechanics behind ignition and starting systems that ensure timely engine activation. This course also engages students with the vital facets of reciprocating engine induction, cooling, and exhaust systems, emphasizing airflow optimization, effective thermal control, and the proper expulsion of exhaust gases for engine efficiency and performance. **A grade of "C" or higher is required to pass this course.** (Catalog p. 170, revised 10.24.25)