

AVIATION GROUND (AVG)

AVG 101 - Private Ground School

Credit Hours: 5, Contact Hours: 5

Division: Aviation

This course will provide the aeronautical knowledge required of a private pilot and prepare the student to take the FAA Private Pilot written examination. Topics include: aerodynamics, engine and aircraft systems, airport operations, weight and balance, aircraft performance, Federal Aviation Regulations, meteorology, airspace, navigation, and flight physiology. Group 2 course.

Required Prerequisites: Instructor Permission Required

AVG 102 - Leadership in Aviation

Credit Hours: 2, Contact Hours: 2

Division: Aviation

This course identifies and develops leadership characteristics specifically applicable to professional pilots. This course is designed to teach students how to combine strong technical knowledge, aeronautical decision-making and ethics to be a successful leader and contributor in the aviation industry. Group 2 course.

Required Prerequisites: AVF 111, may be taken concurrently.

AVG 142 - Remote Pilot Ground

Credit Hours: 3, Contact Hours: 3

Division: Aviation

An online course structured to provide the aeronautical knowledge required of a remote pilot and to prepare the student to take the FAA Unmanned Aircraft General written examination. Topics include: airport operations, aircraft performance, regulations, meteorology, airspace, maintenance, sUAS operations, risk assessment/management. This course will be completed upon the student passing the FAA Unmanned Aircraft General written examination. Group 2 course.

AVG 161 - Mechanics for Pilots

Credit Hours: 3, Contact Hours: 3

Division: Aviation

This course will teach the students about the systems, components, safe repair, and regulations involved with maintaining and operating small aircraft. Students will learn in the classroom and in the maintenance hangar. Group 2 course.

AVG 190 - Aviation Weather

Credit Hours: 3, Contact Hours: 3

Division: Aviation

This course offers thorough coverage in the application and analysis of meteorological charts and how they pertain to aviation. It emphasizes the need for advanced knowledge on how NWS/NOAA charts are derived and how to understand their use in aviation today. Additional emphasis will be placed on predominant weather patterns, associated weather and planning flights to avoid severe weather. A basic understanding in the theory of meteorology is desired. Group 2 course.

Recommended Prerequisites: AVG 101

AVG 201 - International Aviation

Credit Hours: 3, Contact Hours: 3

Division: Aviation

This course will provide an overview and analysis of the international aviation industry. International oversight organizations will be reviewed along with interactions with national regulations. Students will evaluate country differences with regard to aviation regulations, global aviation safety and business forecasts. An analysis of cultural differences for International Aviation Operations will be covered with case studies from current international pilots. Group 2 course.

Recommended Prerequisites: Placement into ENG 111

AVG 202 - Advanced Aircraft Systems

Credit Hours: 3, Contact Hours: 3

Division: Aviation

This course is designed to prepare those students seeking to be career pilots to be successful in the intense aircraft systems ground schools offered by the airlines, manufacturers, and private training providers such as Flight Safety. Each major system of large turbine aircraft will be studied, first, in a general overview and then for a specific model, large transport category, jet aircraft. Group 2 course.

Recommended Prerequisites: AVG 101

AVG 204 - Airline Aircraft Ground School

Credit Hours: 3, Contact Hours: 3

Division: Aviation

This course is designed to prepare those students seeking to be career pilots to be successful in the intense aircraft ground schools provided by the airlines. Canadair Regional Jet systems, limitations, normal and emergency checklist, and flows and flight procedures will be covered in this course. Group 2 course.

Recommended Prerequisites: AVG 202

AVG 231 - Aviation Law

Credit Hours: 3, Contact Hours: 3

Division: Aviation

A study of fundamental legal and aviation law principles as they apply to the various segments of the aviation industry. There will be special emphasis on contemporary aviation legal issues. Group 2 course.

AVG 240 - Corporate Aviation Ground

Credit Hours: 3, Contact Hours: 3

Division: Aviation

Students taking this course will learn about the aspects of business aviation. Aircraft types, regulations, business customs, and future outlooks of corporate aviation will be presented. Group 2 course.

Recommended Prerequisites: AVG 202

AVG 251 - Commercial Ground School

Credit Hours: 4, Contact Hours: 4

Division: Aviation

This course is an advanced study of aviation topics including: GPS, meteorology, radio communications, airspace, and Federal Aviation Regulations. In addition, aircraft systems, career opportunities, aviation safety, aircraft weight and balance, performance charts, and aerodynamics are reviewed with emphasis on commercial pilot operations. Group 2 course.

Required Prerequisites: AVG 252 with a 2.0 or higher

AVG 252 - Instrument Ground School

Credit Hours: 4, Contact Hours: 4

Division: Aviation

This course provides the aeronautical knowledge required for the instrument rating and prepare the student to take the FAA Instrument Rating - Airplane written examination. Topics include: flight instruments, radio navigation, departure, enroute and arrival procedures, VOR, NDB, ILS, and GPS approaches, IFR emergencies, aviation weather, and IFR cross-country flight planning. Group 2 course.

Required Prerequisites: AVF 111 and AVG 101 both with a 2.0 or higher; or equivalent rating.

AVG 260 - Aerosonde UAS Ground

Credit Hours: 4, Contact Hours: 5

Division: Aviation

This ground school and simulator course will provide the foundation training on the Textron Aerosonde UAS platform, one of the leading UAS platforms in the U.S. Students will learn the systems and operational procedures along with in-depth simulator training that will prepare them for the Aerosonde UAS Flight Course. Group 2 course.

Required Prerequisites: AVF 211 may be taken concurrently

AVG 285 - Crew Resource Management

Credit Hours: 3, Contact Hours: 3

Division: Aviation

This course is an introduction to the principles of crew resource management (CRM) and will acquaint students with the concepts and skills required of aircrew members in safely operating multi-place aircraft. Topics will include flight safety concepts, communications skills, effective teamwork principles, and aircraft accident case studies. Students will practice CRM concepts in the Frasca flight training device. Group 2 course.

Required Prerequisites: AVG 252-may be taken concurrently

AVG 381 - Instructor Ground School

Credit Hours: 5, Contact Hours: 5

Division: Aviation

A course of study that will provide basic education principles and a review of the aeronautical knowledge required for the flight instructor (airplane single engine) certificate and prepare the student to take the FAA Fundamentals of Instruction (FOI) and the Flight Instructor-Airplane Single Engine written examinations. Through classroom presentations and one-on-one student teaching, students will gain practical teaching experience. Group 2 course.

Required Prerequisites: AVF 230 and AVG 251 both with a 2.0 or higher