

# AVIATION GROUND (AVG)

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## **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 Prerequisite(s): 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 Prerequisite(s): AVF 111, may be taken concurrently.

## **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.

Recommended Prerequisite(s): Private Pilot Rating (AVF 111)

## **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 Prerequisite(s): 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 Prerequisite(s): 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 Prerequisite(s): AVG 101

## **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 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. Completion of Stage Three is required to enroll in this course. Group 2 course.

Required Prerequisite(s): AVG 252 with a 2.0 or higher.

Recommended Prerequisite(s): Private Pilot Rating (AVF 111)

## **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 Prerequisite(s): AVF 111 and AVG 101 both with a 2.0 or higher; or equivalent rating.

## **AVG 282 - EASA ATPL Groundschool Module1**

**Credit Hours: 3, Contact Hours: 3**

Division: Aviation

This course enables students to complete Module 1 subjects towards the EASA ATPL (A) Pilot License. Subject areas covered include Knowledge/Skills/Attitudes Introduction, Instrumentation, General Navigation, Meteorology and Human Performance/Limitations. Once students successfully complete the course lessons, progress tests and final exam, they will obtain the necessary sign off to then take Module 1 EASA ground school exams. Group 2 course.

Required Prerequisite(s): FAA Commercial Pilot License

**AVG 283 - EASA ATPL Groundschool Module2**

**Credit Hours: 3, Contact Hours: 3**

Division: Aviation

This course enables students to complete Module 2 subjects towards the EASA ATPL (A) Pilot License. Subject areas covered include Radio Navigation, Aircraft General Knowledge, Air Law, Flight Planning and Communications. Once students successfully complete the course lessons, progress tests and final exam, they will obtain the necessary sign off to then take Module 2 EASA ground school exams. Group 2 course.

Required Prerequisite(s): AVG 282, FAA Commercial Pilot License.

**AVG 284 - EASA ATPL Groundschool Module3**

**Credit Hours: 3, Contact Hours: 3**

Division: Aviation

This course enables students to complete Module 3 subjects towards the EASA ATPL (A) Pilot License. Subject areas covered include Operational Procedures, Principles of Flight, Performance and Mass/Balance. Once students successfully complete the course lessons, progress tests and final exam, they will obtain the necessary sign off to then take Module 3 EASA ground school exams. Group 2 course.

Required Prerequisite(s): AVG 282, AVG 283, FAA Commercial Pilot License.

**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 Prerequisite(s): 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 Prerequisite(s): AVF 230 and AVG 251, both with a 2.0 or higher.