

Course Code: AVI 120

Course Title: Private Pilot II

Department: Aviation

Effective Date: Summer 2026

PCS Code: 1.1 - Baccalaureate/Transfer

CIP Code: 14.0101

Repeatability: 0

Credit Hours

Catalog Notation: 2-2.5-3

Credit Hour Distribution:

Lecture: 2

Lab: 2.5

Clinical: 0

Total: 3

General Course Information

Catalog Description

Second in a two-course sequence for FAA Private Pilot certification. Cross-country flight planning and execution, navigation, and review of AVI 101 topics. Includes 37.4 hours flight and simulator training.

General Course Objectives

Develop the knowledge and proficiency required to earn a Private Pilot certificate.

Minimum Placement Levels

English

None

Reading

None

Math

None

Prerequisites

Credit in AVI 101

Methods of Evaluation

Written assignments, quizzes, exams, oral questioning, and observation of flight performance.

Instructional Materials and Additional Supplies

Airplane Flying Handbook, FAA. Current edition.

Pilot's Handbook of Aeronautical Knowledge, FAA. Current edition.

Federal Aviation Regulations and Aeronautical Information Manual (FAR/AIM), FAA. Current edition.

Private Pilot FAA Knowledge Test preparation course, Current edition.

E-6B Flight Computer, Manual type, not electronic.

Cost of aircraft use is covered by course fees.

Course Content

General Learning Outcomes (GLOs)

- Communication: Students will demonstrate the ability to read, write, listen, and speak effectively.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

| Course Segment | Learning Outcomes | Lecture Hours | Lab Hours | Clinical Hours |
|---|--|---------------|-----------|----------------|
| Ground Lesson 16: Aeronautical Charts | 1. Interpret VFR aeronautical charts and select appropriate chart for flight planning and navigation. | 2 | 0 | 0 |
| Ground Lesson 17: Airspace | 1. Understand chart depiction of and operating limitations imposed within various types of airspace including airspace classes, special use airspace, and TFRs. | 2 | 0 | 0 |
| Ground Lesson 18: Pilotage and Dead Reckoning | 1. Understand elements of flight planning for pilotage and dead reckoning navigation including use of aeronautical charts, flight computer, plotter, airplane performance data, and wind and temperature aloft forecasts. | 2 | 0 | 0 |
| Ground Lesson 19: Aircraft Performance | 1. Understand how to use aircraft performance charts. 2. Understand principles and techniques for short- and soft-field operations and S-turns across a road. | 2 | 0 | 0 |
| Ground Lesson 20: Radio Navigation | 1. Understand principles of VOR navigation. | 2 | 0 | 0 |
| Ground Lesson 21: Publications and Emergencies | 1. Understand radar service and Flight Service Station services and how a VFR pilot may receive them. 2. Understand VFR cross-country flight procedures including diversion and lost procedures. | 2 | 0 | 0 |
| Ground Lesson 22: Weather Theory | 1. Understand basic weather theory including properties of stable and unstable air masses and cloud types associated with each. | 2 | 0 | 0 |
| Ground Lesson 23: Weather Theory - Adverse Weather | 1. Understand air masses and weather conditions associated with different types of fronts. 2. Understand the hazards associated with thunderstorms including turbulence, windshear, icing conditions, and instrument meteorological conditions. 3. Understand how to obtain and interpret weather reports and forecasts associated with convective activity. | 2 | 0 | 0 |
| Ground Lesson 24: Weather Reports and Weather Charts | 1. Understand weather requirements for VFR operations in the terminal area and enroute. Determine whether VFR flight is permitted in given conditions. 2. Understand content of, issue criteria, and methods to access aviation weather observations and forecasts including METARs, pilot reports, wind and temperature aloft forecasts, TAFs, AIRMETs, and SIGMETs. | 2 | 0 | 0 |
| Ground Lesson 25: Weather Briefings | 1. Understand types of and methods to obtain aviation briefings. | 2 | 0 | 0 |
| Ground Lesson 26: Aeromedical Factors | 1. Understand mechanisms for and the impact on safety of selected aeromedical factors including hypoxia, hyperventilation, visual illusions, spatial disorientation, and decompression sickness. 2. Understand the IMSAFE checklist, and use in contribution to a go/no-go decision. | 2 | 0 | 0 |

| Course Segment | Learning Outcomes | Lecture Hours | Lab Hours | Clinical Hours |
|--|---|----------------------|------------------|-----------------------|
| Ground Lesson 27: Aircraft Systems | 1. Understand basic function of selected aircraft systems including piston engine and support systems, vacuum system, pitot and static systems, AHRS, ADC, electrical system, and flight controls. | 2 | 0 | 0 |
| Ground Lesson 28: Aerodynamics | 1. Understand selected aerodynamics topics including the four fundamental forces, stalls, spins, slips and skids, and maneuvering speed. | 2 | 0 | 0 |
| Ground Lesson 29: Aviation Regulations | 1. Understand selected regulations pertaining to general aviation from 14 CFR parts 61 and 91, and 49 CFR parts 830 and 1552. | 2 | 0 | 0 |
| Ground Lesson 30: Review and Final Exam | 1. Demonstrate achievement of objectives for ground lessons 16 through 29 lesson outcomes through testing. | 2 | 0 | 0 |
| Flight Lesson 16: Review Maneuvers | 1. Review selected private pilot tasks including stalls, maneuvering during slow flight, steep turns, takeoff, landing, and emergency procedures. | 0 | 2 | 0 |
| Flight Lesson 17: Review; S-Turns, Short Fields | 1. Review selected private pilot tasks including turns around a point, rectangular course, takeoff, landing, and forward slip. 2. Practice S-turns across a road and short-field takeoff and landing. | 0 | 2 | 0 |
| Flight Lesson 18: Review; Soft Fields | 1. Review selected private pilot tasks including go-around traffic pattern and basic instrument flight. 2. Practice soft-field takeoff and landing. 3. Complete a local solo flight. | 0 | 3 | 0 |
| Flight Lesson 19: Simulator Training | 1. Review selected private pilot tasks in the Advanced Aviation Training Device (AATD) including electronic navigation and system/equipment malfunctions. 2. Practice using the flight plan function in a GPS receiver. | 0 | 3 | 0 |
| Flight Lesson 20: First Dual Cross-Country Flight - Daytime | 1. Plan and execute a daytime dual cross-country flight using pilotage and dead reckoning navigation. 2. File, open, and close a VFR flight plan for each segment between airports. | 0 | 2 | 0 |
| Flight Lesson 21: Second Dual Cross-Country Flight - Nighttime | 1. Plan and execute a nighttime dual cross-country flight using pilotage and dead reckoning navigation. 2. File, open, and close a VFR flight plan for each segment between airports. | 0 | 2 | 0 |
| Flight Lesson 22: Third Dual Cross-Country Flight - Daytime | 1. Plan and execute a daytime dual cross-country flight using pilotage and dead reckoning navigation. 2. File, open, and close a VFR flight plan for each segment between airports. | 0 | 2 | 0 |
| Flight Lesson 23: Takeoffs, Landings, Emergencies | 1. Review aural, kinesthetic, and vestibular cues during flight by reference to instruments. Review recovery from unusual flight attitudes. 2. Review selected private pilot tasks including short- and soft-field takeoff and landing, emergency descent, and emergency approach and landing. | 0 | 2.5 | 0 |
| Flight Lesson 24: Simulated Instrument Maneuvers | 1. Review selected private pilot tasks including pilotage and dead reckoning, non-tower airport operations, landings, and ground reference maneuvers. | 0 | 2.5 | 0 |
| Flight Lesson 25: First Solo Cross-Country Flight | 1. Plan and execute a solo cross-country flight using pilotage and dead reckoning navigation. Land at two airports other than CMI. 2. File, open, and close a VFR flight plan for each leg of the flight. | 0 | 2.5 | 0 |

| Course Segment | Learning Outcomes | Lecture Hours | Lab Hours | Clinical Hours |
|--|--|----------------------|------------------|-----------------------|
| Flight Lesson 26: Second Solo Cross-Country Flight | 1. Plan and execute a solo cross-country flight using pilotage and dead reckoning navigation. Land at two airports other than CMI. 2. File, open, and close a VFR flight plan for each leg of the flight. | 0 | 2.5 | 0 |
| Flight Lesson 27: Third Solo Cross-Country Flight | 1. Plan and execute a solo cross-country flight using pilotage and dead reckoning navigation. Land at two airports other than CMI. 2. File, open, and close a VFR flight plan for each leg of the flight. | 0 | 4 | 0 |
| Flight Lesson 28: Review | 1. Review normal, short-field, and soft-field takeoff and landing. | 0 | 1 | 0 |
| Flight Lesson 29: Review | 1. In both dual and solo flight, review private pilot tasks in preparation for the end-of-course test. | 0 | 5 | 0 |
| Lesson 30: End-of-Course Test | 1. Take the private pilot end-of-course test. | 0 | 1.4 | 0 |

Total Contact Hours

| Lecture Hours | Lab Hours | Clinical Hours |
|----------------------|------------------|-----------------------|
| 30 | 37.4 | 0 |