

AVI 112 Course Number Primary Flight Course Title 2 Credits

Hours: 1 / 46.9	Pre-requisite: AVI 131 & ENG101	Implementation
Lecture / Field Hours	Co-requisites: AVI 131 & ENG101	Fall 2023

<u>Catalog description</u>: Provides flight training required to begin the cross-country training phase for the FAA private pilot certificate. Consists of 23.0 hours of flight training, 13.4 preflight planning hours, and 10.5 hours of ground/pre/post instruction. Fee required (see Mercer County Community College's Aviation Policies and Procedures Manual).

General Education Category:	Course coordinator:
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Pre-requisites:

- 1. Eligibility for College Math and English
- 2. FAA-approved Medical
- 3. US citizenship or TSA approval

Required texts & Other materials:

- 1. Owner's or Operator's Manual of Aircraft used in training
- 2. Airplane Flying Handbook (ISBN 1619545128)
- 3. Airman Certification Standards (ISBN 1619549034)
- 4. The Student Pilot's Flight Manual by William K. Kershner (ISBN 9781619545816)
- 5. Private Pilot Manual by Jeppesen Sanderson (ISBN 0884876608)

Flight Training Content:

This course consists of Blocks 1 through 3 of the Private Pilot Course. Details can be found in the latest version of the FAA-approved Training Course Outline (TCO).

Flight Training Course Objectives:

The objectives of this flight-training course are to provide the student with the aeronautical skills and experience necessary to meet the aeronautical requirements to proceed to the final phase of training for private pilot certificate with an airplane category rating and single-engine land class rating.

Flight Training Course Completion Standards:

The course completion standards are based upon the Airman Certification Standards as outlined by the Federal Aviation Administration. To meet the flight training course completion standards, the student must demonstrate, through flight tests and school records, that he/she meets the requirements to proceed to the final phase of the private pilot training. Progress checks may include material covered in any previous lesson.

* ADDITIONAL TIME MAY BE NEEDED TO MEET COMPLETION STANDARDS AND PROFICIENCY.

Course Student Learning Outcomes (SLO):

At the completion of the course, the student will be able to:

- 1. Organize and present weight and balance information, performance data, and weather data associated with the flight. (ILG 1,2,3,4) (PLO 1,4,6)
- 2. Demonstrate proper utilization of various checklists and verification that the aircraft can be safely flown. (ILG 1, 11) (PLO 1,4)
- 3. Demonstrate that he/she can operate an aircraft at a towered and a nontowered airport utilizing appropriate communication procedures, taxi, and inflight airport operations and procedures. (ILG 1,4,5) (PLO 1,4)
- 4. Demonstrate the variety of short and soft take-off and landings, and goarounds. (ILG 2,3,4) (PLO 1,4)
- 5. Perform various types of performance and ground reference maneuvers with skill, including slow flight, stalls, steep turns, rectangular course, s-turns, and turns-about-a-point. (ILG 3) (PLO 1,4)
- 6. Perform climbs, turns, straight-and-level flight, descents, unusual attitude recovery, and exhibit knowledge of the elements related to flight solely by reference to instruments. (ILG 1,2,3,4,11) (PLO 1,4)
- 7. Conduct the safe operation of the aircraft during a simulated emergency approach and landing; analyze and take appropriate action when systems and equipment malfunction occur; identify appropriate equipment that should be aboard the aircraft in the event of an emergency and for survival. (ILG 1,3,4,11) (PLO 1,4)
- 8. Complete the after-landing, securing, and parking of the aircraft. (ILG 1,4) (PLO 1,4)

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.

Institutional Learning Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

Institutional Learning Goal 3. Science. Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

Institutional Learning Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

Institutional Learning Goal 5. Social Science. Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.

Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Program Learning Outcomes for Aviation Technology (PLO)

Students will be able to:

- 1. Demonstrate the knowledge and skills required to obtain the private and commercial certificates and instrument rating, including aeronautical technical skills and decision making, while demonstrating safety as their primary focus.
- 4. Demonstrate effective and correct written and verbal communication.
- 6. Demonstrate an awareness of the ethical and professional issues associated with the aviation industry, including the importance of becoming a life-long learner in the aviation world.

Units of study in detail - Unit Student Learning Outcomes:

Unit I Block 1 [Supports Course SLO 1, 2, and 8]

Learning Objectives

The student will be able to:

- Become familiar with the training airplane and its flight characteristics.
- Gain an understanding of the flight training program, academic and flight standards, and pilot certification.

Unit II Block 2 [Supports Course SLOs 1, 2, 4, 5, 6, and 8]

Learning Objectives

The student will be able to:

- Gain proficiency in the maneuvers and procedures taught in Flight Lessons 1 and 2, through flight reviews.
- Gain the ability to understand and perform the training maneuvers listed in Flight Lessons 3 through 7.
- Be introduced to Aeronautical Decision-Making techniques.

Unit III Block 3 [Supports Course SLOs 3, 4, 7, and 8]

Learning Objectives

The student will be able to:

- Acquire increased knowledge and proficiency in the flight maneuvers necessary for local solo flight operations.
- Obtain the knowledge and proficiency to fly solo in the local area.

Evaluation of student learning:

Specific Grading:

Letter Grade	Nominal%
А	93-100
A-	90-92
B+	87-89
В	83-86
B-	80-82
C+	77-79
С	70-76
D	60-69
F	0-59

- The flight grade is dependent on a practical outcome of the progress check flights, class attendance, and participation policy. Attendance and completion of class assignments are mandatory.
- A Rubric for the Flight Class is as follows:

The practical assessment is based upon the completion standards listed for each progress check flight. The examiner is obligated by FAA standards to adhere to the completion standards set forth for each progress check.

- A = Completes all progress checks on first attempt with a Satisfactory grade, perfect attendance in flight class, and participates as per MCCC policy.
- B = Completes all progress checks on first attempt with a satisfactory grade, perfect attendance in flight class, and participates as per MCCC policy.
- C = Completes at least 1 out of 2 progress checks on first attempt with as satisfactory, no more than 2 absences from flight class, and participates as per MCCC policy.
- D = Completes at least 1 out of 2 progress checks on first attempt with a satisfactory grade, no more than 2 absences from flight class, and participates as per MCCC policy.
- F = Does not complete progress checks on first attempt, does not attend class regularly and does not participate in class and/or student does not complete final progress check within time period designated.