COURSE OUTLINE

AVI 251 **Course Number**	**ATP Prep II** **Course Title**	**3** **Credits**
Hours: 140.6 **Field Hours**	**Pre-requisite: AVI 250**	**Implementation** **Fall 2023**

Catalog description: Students develop the proficiency, knowledge and skills to complete the required day and night, VFR and IFR, cross-country hours for completion of the Airline Transport Pilot certificate program. This training and assessment consist of 51.0 flight hours, 85.6 hours of preflight planning, and 4.0 hours of ground/pre/post instruction. Fee required (see Mercer County Community College's *Aviation Policies and Procedures Manual*).

General Education Category:
Not GenEd

Course coordinator:
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Required texts & Other materials:

1. Owner's or Operator's Manual of Aircraft used in training
2. Airplane Flying Handbook (ISBN 1619545128)
3. Instrument Flying Handbook (ISBN 979-8776640544)
4. Commercial Pilot Airman Certification Standards (ISBN 1619549077)
5. Airline Transport Pilot Airman Certification Standards (ISBN 1619548992)
6. The Advanced Pilot's Flight Manual by William K. Kershner (ISBN 1644250101)
7. Guided Flight Discovery Instrument/Commercial by Jeppesen Sanderson (ISBN 0884872785)
8. FAR/AIM

Flight Training Content:
This course consists of the final two stages of the ATP Prep Special Curricula Course. Details can be found in the latest version of the FAA-approved Training Course Outline (TCO) and Flight Syllabus.

Flight Training Course Objectives:
The flight training course will provide the student with the aeronautical skills and increase their experience to allow them to competently, confidently, safely and legally complete cross-country flights in an airplane by both day and night, VMC and IMC.

Flight Training Course Completion Standards:
The course completion standards are based upon the cross-country guidance given in the Instrument Airman Certification Standards and Airline Transport Pilot Practical Test Standards. To meet the flight training course completion standards, the student must demonstrate, through flight tests and school records that they meet or exceed these requirements. Periodic 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 meet the following requirements:

1. **Commercial Airman Certification Standards:**
    a. I - Pre-Flight Preparation - Items F, G **(ILG 1,10,11) (PLO 1,4)**
    b. II - Pre-Flight Procedures - Items A, B, C, D, F **(ILG 1,10,11) (PLO 1,4)**
    c. Ill - Airport Operations - Item B **(ILG1,2,3,4,5) (PLO 1,4)**
    d. IV - Take Offs, Landings and Go-Arounds - Items A, B, C, D, E, F, M, N **(ILG1,2,3,4,5) (PLO 1,4)**
    e. V - Performance Maneuvers -A or B, C or D, E **(ILG 2,3) (PLO 1,4,6)**
    f. VII - Slow Flight and Stalls – All **(ILG 2,3) (PLO 4)**
    g. VIII - High Altitude Operations – All **(ILG 1,3,4,11) (PLO 1,4)**
    h. IX - Emergency Operations - A, B, C **(ILG 1,3,4,11) (PLO 1,4)**
    i. XI - Post-Flight Procedures - Item A **(ILG 1,4) (PLO 1,4)**
2. **ATP Airman Certification Standards (ILG 1, 2, 3, 4, 5, 10, 11) (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 10. Information Literacy: Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.
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 4** [Supports Course SLOs 1 and 2]

Learning Objectives
The student will be able to:

- Competently, confidently, safely and legally complete cross-country flights in an airplane by both day and night, VMC and IMC.

Unit II **Block 5** [Supports Course SLOs 1 and 2]

Learning Objectives
The student will be able to:

- Competently, confidently, safely and legally complete cross-country flights in an airplane by both day and night, VMC and IMC.

Evaluation of student learning:

The grade awarded in AVI 251 will be determined by Oral and Practical Examination as outlined in both the Commercial and Instrument Airman Certification Standards.

Specific Grading:

A	*Commercial:*	Meets 3 Areas of Operation and Exceeds 8 Areas of Operation
	Instrument:	Meets 2 Areas of Operation and Exceeds 6 Areas of Operation
8	*Commercial:*	Meets 5 Areas of Operation and Exceeds 6 Areas of Operation
	Instrument:	Meets 4 Areas of Operation and Exceeds 4 Areas of Operation
C	*Commercial:*	Meets 7 Areas of Operation and Exceeds 4 Areas of Operation
	Instrument:	Meets 6 Areas of Operation and Exceeds 2 Areas of Operation
D	*Commercial:*	Meets 11 Areas of Operation
	Instrument:	Meets 8 Areas of Operation
F	*Commercial:*	Does Not Meet any Areas of Operation
	Instrument:	Does Not Meet any Areas of Operation