

B.S. in Aeronautical Technology Professional Pilot (PPILB)

Graduates of the professional pilot bachelor program will demonstrate/possess:

A. General Knowledge

1. An ability to apply knowledge of mathematics, science, and applied sciences.
2. An ability to analyze and interpret data.
3. An ability to function on multi-disciplinary and diverse teams.
4. An understanding of professional and ethical responsibility.
5. An ability to communicate effectively, including both written and verbal communication skills.
6. A recognition of the need for, and an ability to engage in, life-long learning.
7. A knowledge of contemporary issues.
8. An ability to use the techniques, skills, and modern technology necessary for professional practice.
9. An understanding of the national and international aviation environment.
10. An ability to apply pertinent knowledge in identifying and solving problems.

B. Aviation specific knowledge in the following core areas:

1. Attributes of an aviation professional, career planning, and certification.
2. Aircraft design, performance, operating characteristics, and maintenance.
3. Aviation safety and human factors.
4. National and international aviation law and regulations.
5. Airports, airspace, and air traffic control.
6. Meteorology and environmental issues.

C. Certification: Student will obtain the following ratings:

1. Commercial pilot with instrument and multiengine rating.
2. Flight Instructor with instrument instructor rating.

Students share in the responsibility for a successful university educational experience. Upon completion of their degree and regardless of disciplinary major, undergraduates are expected to demonstrate ability in at least five essential areas.

Knowledge: Students will demonstrate a depth of knowledge and apply the methods of inquiry in a discipline of their choosing, and they will demonstrate a breadth of knowledge across their choice of varied disciplines.

Critical Thinking: Students will demonstrate the ability to access and interpret information, respond and adapt to changing situations, make complex decisions, solve problems, and evaluate actions.

Communication: Students will demonstrate the ability to communicate clearly and effectively.

Diversity: Students will demonstrate awareness and understanding of the skills necessary to live and work in a diverse world.

Academic and Professional Integrity: Students will demonstrate awareness and understanding of the ethical standards of their academic discipline and/or profession.

The PPIL outcomes support the University outcomes. They relate as follows:

Knowledge: A1, A6, A7, A8, B2, B3, A5, A6, C1, C2

Critical thinking: A2, A10

Communications: A5
Diversity: A3, A9, B4
Academic and Professional Integrity: A4, B1

Summary of the 2008-2009 Annual Progress Report on Assessment of Student Learning

We have obtained a new CRJ200 flight training device to be used in PPIL 416. We have implemented Aerosim software to teach Flight Management Systems in PPIL 425 along with teaching CRJ200 systems. Students are not prepared for PPIL 416 so we are creating a new course PPIL 387 which will be a prerequisite. We are eliminating a computer course, Database Management and one credit hour of aviation electives. In FAA knowledge testing we have shown steady improvement over the last 4 years in Advanced Ground Instructor, Flight Instructor Airplane and Fundamentals of Instruction. Our other scores have remained relatively flat. Human factor, ability to analyze and interpret data and written communication goals were met. We need more work on weight and balance and FAA practical test. Students did not do well on the climatic change test given in PPIL 342.