Aviation Tech/ Professional Piloting (ATP)

Courses

ATP A100 Private Pilot Ground School 3 Credits

Prepares students for Federal Aviation Administration (FAA) Private Pilot Airplane Knowledge Test. Includes basic aerodynamics, aircraft systems, engine operation, flight instruments, radio communication, navigation, weather information and weather dissemination services. Covers Federal Aviation Regulations (FARs) and the Aeronautical Information Manual (AIM).

Prerequisites: (MATH A055 with a minimum grade of C or concurrent enrollment or MATH A104 with a minimum grade of C or concurrent enrollment or MATH A105 with a minimum grade of C or concurrent enrollment or MATH A121 with a minimum grade of C or concurrent enrollment or MATH A151 with a minimum grade of C or concurrent enrollment or MATH A152 with a minimum grade of C or concurrent enrollment or MATH A155 with a minimum grade of C or concurrent enrollment or MATH A211 with a minimum grade of C or concurrent enrollment or MATH A212 with a minimum grade of C or concurrent enrollment or MATH A221 with a minimum grade of C or concurrent enrollment or MATH A251 with a minimum grade of C or concurrent enrollment or MATH A251F with a minimum grade of C or concurrent enrollment or MATH A252 with a minimum grade of C or concurrent enrollment or MATH A252F with a minimum grade of C or concurrent enrollment or MATH A253 with a minimum grade of C or concurrent enrollment or ALEKS Overall Test 1 with a score of 30 or ALEKS Overall Test 2 with a score of 30 or ALEKS Overall Test 3 with a score of 30 or ALEKS Overall Test 4 with a score of 30 or ALEKS Overall Test 5 with a score of 30) and (ENGL A109 with a minimum grade of C or WRTG A110 with a minimum grade of C or WRTG A111 with a minimum grade of C or WRTG A1W with a minimum grade of C or WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A2W with a minimum grade of C or (Accuplacer-Reading Comp with a score of 080 and Accuplacer-Sentence Skills with a score of 090) or Accuplacer-Sum AASS + AARC with a score of 170 or (Accuplacer NG Writing with a score of 265 and Accuplacer NG Reading with a score of 265) or Accuplacer NG AAWR + AARE with a score of 530 or Enhanced ACT English with a score of 22 or EVIDENCE-BASED READ/WRIT SCORE with a score of 560).

ATP A101 Pre-Professional Flying 2 Credits

Provides beginning flight instruction for students intending to become professional pilots.

Special Note: Open-entry/open-exit.

Registration Restrictions: FAA Student Pilot Certificate, FAA Class II Medical Certificate and department approval. Prerequisites can be waived with a passing score on Current Private Pilot Airplane Knowledge Test.

Prerequisites: ATP A100 with a minimum grade of B.

ATP A104 Flying Alaska Bush 3 Credits

Provides specialized discussion concerning unique flying conditions faced by Alaskan pilots. Covers basic aerodynamics, mountain flying, skis, floats, wheels, judgment of unimproved landing areas, characteristics of Alaskan weather, external loads, and emergency field maintenance.

Registration Restrictions: Private Pilot Certificate or higher rating

ATP A107 Remote Pilot Aircraft System Part 107 1 Credit Introduces the history, applications, and technologies of unmanned aerial systems (UAS). Prepares the student to take the Federal Aviation Administration (FAA) Part 107 test.

ATP A116 Instrument Ground School 3 Credits

Provides preparation for the Federal Aviation Administration (FAA) Instrument Pilot Knowledge Test and flight training under Instrument Flight Rules (IFR). Includes human factors, flight systems, instrument navigation, aeronautical charts and publications, airspace, FAA regulations, and pilot responsibilities.

Special Note: Two hours in a Flight Training Device (FTD) is required.

Registration Restrictions: FAA Private Pilot Certificate or equivalent **Prerequisites:** ATP A100 with a minimum grade of C and ATP A101 with a minimum grade of C.

ATP A126 Instrument Flying 2 Credits

Fulfills Federal Aviation Administration (FAA) flight training requirements for an Instrument Airplane rating under Federal Aviation Regulation (FAR) Part 141.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval and, if course prerequisite is not met, FAA Private Pilot Certificate and current FAA second class medical certificate

Prerequisites: ATP A116 with a minimum grade of C or concurrent enrollment.

ATP A127 Helicopter Transition Instrument Flying 2 Credits
Fulfills Federal Aviation Administration (FAA) flight training
requirements for an Instrument Airplane additional category/class under
Federal Aviation Regulation (FAR) Part 141.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval

ATP A200 Commercial Ground School 3 Credits

Provides preparation for the Federal Aviation Administration (FAA) Commercial Pilot Knowledge Test. Includes advanced studies of private pilot topics, high performance and complex aircraft, commercial flight maneuvers, and commercial Federal Aviation Regulations (FARs).

Registration Restrictions: FAA Private Pilot Certificate or equivalent

ATP A207 Remote Pilot Applications 3 Credits

Studies major subsystems common to most Unmanned Aircraft Systems (UAS), and provides advanced UAS platform training. Covers UAS power systems, autopilot systems, user-interface software, sensors, aerodynamics, flight controls, airborne communication systems, as well as mission design, planning, execution, and analysis. Includes the challenges of UAS integration into the national airspace system, crew qualifications and training, safety, and human factors.

Special Note: UAS Part 107 License is needed prior to the start of this course.

ATP A208 Remote Pilot Flight Operations 2 Credits

Presents the practical elements of Remote Pilot operations. Exposes students to physical interaction with Unmanned Aerial Systems (UAS) and flight in the National Airspace System (NAS) after completion of the Federal Aviation Administration Part 107 license and the advanced drone operations course.

Special Note: Enrolled students must present a current FAA Part 107 license.

ATP A218 Commercial Flying I 1.5 Credit

Provides flight training to review basic private pilot maneuvers and to introduce the advanced flight maneuvers required of a commercial pilot.

Special Note: Open-entry/open-exit.

Registration Restrictions: Private Pilot Certificate. Department approval required.

Prerequisites: ATP A116 with a minimum grade of C and ATP A200 with a minimum grade of C or concurrent enrollment.

ATP A219 Commercial Flying II 1.5 Credit

Provides flight training to build proficiency and experience in crosscountry flying and night operations. Includes introduction to complex airplanes.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval **Prerequisites:** ATP A218 with a minimum grade of C.

ATP A220 Commercial Flying III 2 Credits

Develops proficiency required to pass the FAA Commercial Pilot Practical Flight Test.

Practical riight Test.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval **Prerequisites:** ATP A219 with a minimum grade of C.

ATP A221 Helicopter Transition Commercial Flying I **1.5** Credit Provides flight training to review basic private pilot maneuvers and introduces the advanced flight maneuvers required of a commercial fixed wing pilot.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval

ATP A222 Helicopter Transition Commercial Flying II **1.5** Credit Provides flight training to build proficiency and experience in cross-country flying and night operations. Includes introduction to complex airplanes.

Special Note: Open-entry/open-exit.

Registration Restrictions: Department approval

ATP A223 Helicopter Transition Commercial Flying III 2 Credits Develops proficiency required to pass the FAA Commercial Pilot Airplane Practical Flight Test.

Special Note: Open-entry/open-exit.

 $\textbf{Registration Restrictions:} \ \ \textbf{Department approval}$

ATP A225 Tailwheel Airplane Transition 1 Credit

Intended for pilots wishing to transition from tricycle gear airplanes to tailwheel airplanes.

Special Note: Open-entry/open-exit.

Registration Restrictions: FAA Commercial Pilot Airplane Single-

Engine Certificate

Prerequisites: ATP A220 with a minimum grade of C.

ATP A235 Elements of Weather 3 Credits

Defines the elements of weather. Explains methods of measurement, composition of the atmosphere, description of atmospheric processes, and weather movement. Explains the general circulation of the atmosphere, wind and secondary circulation. Details weather reports and forecasts. Explains the use of weather satellites.

ATP A300 CFI Ground School 3 Credits

Prepares students for the Federal Aviation Administration (FAA) Certified Flight Instructor Knowledge Test. Includes principles of teaching and learning, analysis of student motivation, flight training syllabi, and the flight instructor's role and responsibilities. Covers performance and analysis of flight training maneuvers, advanced aerodynamics, fundamentals of instrument flight, flight training publications, and Federal Aviation Regulations (FARs).

Registration Restrictions: Department approval **Prerequisites:** ATP A200 with a minimum grade of C.

ATP A301 CFI Flying 2 Credits

Addresses Federal Aviation Administration (FAA) flight training requirements and required knowledge for obtaining a Certified Flight Instructor (CFI) certificate under Federal Aviation Regulations (FAR) Part 141.

Special Note: Open entry/open exit.

Registration Restrictions: FAA Commercial Pilot Certificate with Instrument Rating or equivalent. Departmental approval required. **Prerequisites:** ATP A220 with a minimum grade of C and ATP A300 with a minimum grade of C or concurrent enrollment.

ATP A305 Airplane Multiengine Land Rating 2 Credits

Provides flight and ground instruction for Professional Piloting students seeking the Federal Aviation Administration (FAA) Airplane Multiengine Land Rating.

Special Note: Open entry/open exit.

Registration Restrictions: Department approval

Prerequisites: ATP A220 with a minimum grade of C or concurrent enrollment.

ATP A320 Flight Dynamics 3 Credits

Applies selected physical and mathematical principles to the analysis and prediction of aircraft performance. Presents general methods for analyzing and predicting aircraft performance in all flight regimes. Builds on knowledge introduced in previous pilot ground and flight courses, aviation weather courses, science, and mathematics courses.

Registration Restrictions: Junior or senior standing

Prerequisites: AMT A171 with a minimum grade of C and ATP A200 with a minimum grade of C and (MATH A151 with a minimum grade of C or MATH A152 with a minimum grade of C or MATH A155 with a minimum grade of C or MATH A211 with a minimum grade of C or MATH A212 with a minimum grade of C or MATH A221 with a minimum grade of C or MATH A251 with a minimum grade of C or MATH A251F with a minimum grade of C or MATH A252F with a minimum grade of C or MATH A253 with a minimum grade of C or MATH A253 with a minimum grade of C or MATH A253 with a minimum grade of C).

ATP A332 Transport Aircraft Systems 3 Credits

Describes and examines the components of transport aircraft systems, their design, performance, capabilities, limitations, interrelationships, and contribution to the operation, safety, efficiency and economy of the aircraft.

Prerequisites: ATP A200 with a minimum grade of D.

ATP A405 Additional CFI Rating 2 Credits

Provides flight instruction for Professional Piloting students seeking additional ratings on their Flight Instructor Certificate, e.g., Instrument and/or Multi-engine.

Special Note: Open-entry/open-exit.

 $\textbf{Registration Restrictions:} \ \text{Certified Flight Instructor Certificate}$

required. Department approval required.

ATP A406 Flight Instructor Instrument Flight 2 Credits

Provides instruction for an additional flight instructor rating instrument airplane in accordance with the Federal Aviation Administration Practical Test Standards.

Registration Restrictions: Junior or senior standing and must already hold a Commercial Pilot Certificate

ATP A433 Aerospace Physiology 3 Credits

Surveys and explores the physiological information significant to pilots and others in the aviation community. Discusses the importance of physiological factors involved in flight.

Prerequisites: ATA A331 with a minimum grade of C.