

Flight Operations Courses

See the Aviation Student Handbook for more information on flight lab course fees as well as aircraft and instruction rates for supplemental flight training.

AVFL 2121 Foundations of Flight (3)

Foundations of Flight covers principles, procedures and knowledge that professionals in the aviation industry use routinely to operate aircraft. This course lays the foundation for the student's career as a pilot. The course includes aeronautical decision making; an introduction to human factors; the study of aircraft and engine operation and limitations; aircraft flight instruments; navigation; navigation computers; national weather information; federal aviation regulations; flight information publications; and radio communications and navigation. The class also prepares the student to take the FAA Private Airplane (PAR) knowledge test.

AVFL 122A Foundations of Flight I (1)

AVFL 122B Foundations of Flight II (1)

The Foundations of Flight labs consist of supervised ground and flight instruction to lay the foundation for students to become a professional pilot. Students will progress from their first flight to earning a Private Pilot certificate. Instruction includes pre-flight, airport operations, flight maneuvers, night operations, communication, navigation, emergency procedures, and crew resource management. In Foundations of Flight Lab I, students learn basic flight maneuvers to prepare the student for safe solo operation of the aircraft. In Foundations of Flight Lab II, students plan and conduct solo local flights and solo cross country flights to airports located throughout the region. An emphasis is placed on proper flight planning and making the appropriate decisions when in flight. Students also receive additional flight maneuvers training and practice to prepare the student for the FAA checkride.

AVFL 221 Pilot in Command Development (1)

Strategies for transitioning to new aircraft and alternate aircraft flight and data information systems. Students learn to effectively use a primary flight display (PFD) and apply information from a multi-function display (MFD) to navigate and execute holding and instrument approach procedures. Provides techniques for single-pilot resource management.

AVFL 222 Pilot in Command Development Lab (1)

The lab includes development of skills that provide a foundation for advanced flight courses. Students gain experience transitioning to a new aircraft with an integrated flight deck and gain experience making solo VFR cross-country flights based on realistic flight scenarios. Students also gain experience in a flight training device (FTD) to develop skills in basic attitude instrument flight, instrument navigation, holding procedures, partial panel operations, and instrument approach procedures. Throughout the course a special emphasis is placed on helping students develop learning strategies for a scenario based training environment.

AVFL 231 Intermediate Flight (3)

Knowledge necessary to effectively operate in the instrument flight environment. Coverage includes instrument navigation, aviation regulations applicable to instrument flight, and procedures for operating in the national airspace system. Departure procedures, enroute operations, holding and arrival procedures are covered in detail. Use of available weather information, observed weather conditions, and recognition and avoidance of critical weather situations. Also covered is decision making and judgment and planning required to safely operate within the IFR environment. Students are prepared to pass the FAA instrument knowledge exam and to combine this aeronautical knowledge with their instrument flight training to successfully obtaining an instrument rating.

AVFL 232 Intermediate Flight Lab (1)

The lab includes further development of attitude instrument flight skills, instrument navigation and resource management abilities. Application of information from IFR charts and publications to departure, arrival, enroute, holding, and approach procedures in realistic flight scenarios. Flight scenarios are used for developing situational awareness, risk management, and aeronautical decision making skills as well as preparing the student for the instrument rating practical test.

AVFL	341	Advanced Flight	(3)
<p>Development of the knowledge necessary for effectively functioning as a commercial pilot. Advanced concepts in human factors including: resource management, aeronautical decision making, and physiology; along with aircraft design factors including aerodynamics and airplane systems. The course includes integration of knowledge of commercial operations in the national airspace system with federal regulations related to airplane operations and communications. Practical use of facilities and techniques used in radio, satellite, and visual navigation are integrated with study of use of the best available in-flight weather and airport facilities information and obtaining the latest hazards information. All of the material needed to pass the FAA Knowledge Exam for the Commercial Pilot Certificate is covered as a part of this course.</p>			
AVFL	342A	Advanced Flight Lab I	(1)
AVFL	342B	Advanced Flight Lab II	(1)
<p>Scenario-based training focused on further development of cross-country procedures and emergency procedures. Practice applying and demonstrating instrument procedures in the IFR system. Demonstration of safe operations using risk management, aeronautical decision making (ADM) and single pilot resource management (SRM) techniques. Practice- and scenario-based training focused on enhancing the student's flying skills, cross-country procedures, emergency procedures, and complex systems. Development of the necessary knowledge, skill, and experience required to exceed the requirements of the commercial single engine land practical test. The PT will demonstrate safe operations considering risk management, ADM and SRM.</p>			
AVFL	400	Fundamentals of Instruction Ground School	(2)
<p>The student will obtain the knowledge, skill, and aeronautical experience necessary to aeronautical experience necessary to meet the requirements of a Flight Instructor Certificate with an airplane category rating and a single-engine class rating. AVFL 400 and 410 must be taken concurrently.</p>			
AVFL	410	Instructor Ground School	(2)
<p>The student will obtain the knowledge, skill and aeronautical experience necessary to meet the requirements of a Flight Instructor Certificate with an airplane category rating and a single-engine class rating. AVFL 400 and 410 must be taken concurrently.</p>			
AVFL	412	Special Topics in Aviation	(1-8)
<p>This is a general category for special topics courses, which are designed to broaden the knowledge of students interested in aviation.</p>			
AVFL	420	Instructor Flight Lab I	(1)
<p>The student will obtain the knowledge, skill and aeronautical experience necessary to meet the requirements of a Flight Instructor Certificate with an airplane category rating and a single-engine class rating.</p>			
AVFL	421	Professional Flight I	(3)
<p>In the first segment of this course the student will obtain the knowledge, skill, and aeronautical experience necessary to meet the knowledge requirements of a Multi-Engine Certificate and multi-engine class rating. The accompanying lab will prepare the student for completion of the Airplane Multi-Engine Rating Practical Test. The second segment of the multi-engine airplane operations course presents significant differences encountered operating turboprop powered pressurized multi-engine airplanes. Students will learn the operating procedures and limitations of a light turboprop multi-engine airplane. They will then apply their knowledge in a simulation lab environment practicing crew coordination and operation of the sample airplane along assigned routes using procedures defined in the academic class.</p>			
AVFL	422	Professional Flight I Lab	(1)
<p>This lab will include an opportunity for students to demonstrate their knowledge, skills and application of safety practices in simulated environments and multi-engine aircraft. This course focuses on decision making skills, CRM, communication and knowledge of advanced technology required of a professional pilot. Development of the necessary knowledge, skill, and experience required by the commercial multi-engine land practical test.</p>			
AVFL	430	Flight Instructor Instrument Ground School	(1)
<p>The student will obtain the knowledge and experience necessary to meet the requirements of an Instrument Flight Instructor Certificate.</p>			

AVFL 440 CFI Internship (Flight Operations Center) (1-4)

Students who complete the college's flight labs and hold a certified flight instructor rating are eligible to apply for a CFI Internship experience at the Flight Operations Center. Select students will be assigned to one student and complete observations and teaching components as they work with a mentor instructor to further develop their instructional skills. Monthly class sessions reinforce the student learning objectives and allow interns to compare their experiences with other interns. Prerequisites: junior or senior standing; CFI Certificate; and approvals from the Career Center internship coordinator and the Director of Flight Education.

AVFL 450 Flight Instructor Instrument Flight Lab (1)

The student will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements of an Instrument Flight Instructor Certificate.

AVFL 460 Flight Instructor Multi-Engine Ground School (1)

The student will obtain the knowledge and experience necessary to meet the requirements of a Multi-Engine Flight Instructor Certificate.

AVFL 461 Professional Flight II (2)

This course will expand the students' knowledge of high altitude/high speed aerodynamics, advanced aircraft systems, human factors, operating policies and the regulatory environment surrounding commercial air carrier operations. The course will teach the industry standards for safely practices while efficiently flying commercial passengers and cargo operations. It includes the latest industry applications of crew resource management in an academic and simulation environment. This course and its accompanying lab are designed to exceed the FAA mandated Airline Transport Pilot Certification Training Program requirements for endorsement to take the FAA Airline Transport Pilot, Airplane Multi-Engine Knowledge Exam.

AVFL 470 Flight Instructor – Multi-Engine Flight Lab (1)

The student will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements of a Multi-Engine Flight Instructor Certificate.

AVFL 499 Continuing Registration Flight Training (0)

Students who wish to continue flight training during May Term and summer without registering for formal ground schools or flight labs must register for AVFL 499. This zero (0) credit flight lab is restricted to continuing students who are completing flight requirements for specific FAA courses.