Utah State University

Aviation Technology—Professional Pilot Major

Department of Engineering and Technology Education
College of Engineering

http://www.ete.usu.edu/

Published May 2008 Effective for students beginning degree Summer Sem. 2008 thru Spring Sem. 2009

Admission Requirements For This Major

1. New freshmen admitted to USU in good standing qualify for admission to this major.

2. Transfer students from other institutions need a 2.5 total GPA for admission to this major in good standing.

3. Students transferring from other USU majors need a total GPA of 2.4 in major courses for admission to this major in good standing. A cumulative GPA of 2.5 must be maintained.

The Program

The Department of Engineering and Technology Education at Utah State University offers a course of study leading to the Bachelor of Science degree in Aviation Technology—Professional Pilot. Students choosing this major may ultimately work for a major airline. Most major airlines require applicants to have accumulated 1,500-2,000 hours of flight time. These can be earned by instructing or flying for charter, commuter, or corporate airlines.

During the freshman and sophomore years, students in this major will be completing courses that provide general technological backgrounds and skills. The junior and senior years are reserved for concentrated study in flight technology. Students may also choose from a specific list of required upper-division elective courses. These courses can be used to broaden educational backgrounds and enhance career opportunities.

Students should work closely with their advisor when choosing electives and filling out the necessary matriculation forms. The advisor can be a useful source of information and assistance, but it is the student's responsibility to seek an advisor's aid and meet the necessary graduation requirements.

Admission

Students attending USU for the first time are admitted on the basis of an index score, which is a reflection of high school grades and ACT or SAT scores.

USU will accept students from other institutions provided they have a good academic standing. Students wishing to enter the Aviation Technology—Professional Pilot major must have a grade point average of 2.5 or higher in order to be admitted into the College of Engineering. To qualify for enrollment in Huntsman School of Business courses, students must have a cumulative grade point average of 2.67 or higher.

Transfer credit from accredited U.S. institutions is automatically posted. Posting of credit from U.S. institutions does not imply acceptance as credits toward a degree.

A transfer student and a college academic advisor initiate a petition for acceptance of transfer credits to meet degree requirements (department head and dean must approve). If transfer credit is not from a Utah school, it is the student's responsibility to provide a catalog or copies of catalog materials (usually available online) to show the content of courses taken.

D grades are not accepted as transfer credit, except from Utah schools where USU is required to do so for general education coursework. The repeat policy applies to transfer courses as well as courses taken at USU (see *Graduation Requirements* section on this sheet).

Transfer credit from foreign and nonaccredited institutions may be used for meeting degree requirements only if posted on the USU record of the student.

Courses from accredited institutions having similar content can be transferred and substituted for USU courses shown in the curriculum. Upper-division coursework cannot be transferred from a two-year institution. Flight courses taken in a program other than for college credit cannot automatically be transferred for university credit. If students feel that they already have an understanding of the material taught in the flight classes, they may challenge the courses. See advisor for details.

***U.S. FAR 141.77 Limitations C1 and C2* govern the transfer of previous pilot experience to the USU flight program. A student participating in a part 141-approved training course may be given 50 percent of the flight hours previously completed. A student who is enrolled in a part 61-approved training course may transfer up to 25 percent of the previous pilot experience.**

Graduation Requirements

Students must make steady progress in both their academics and their flying to remain in good standing in this program.

A student can repeat no more than six of the required courses in order to satisfy graduation requirements. Multiple repeats of the same course are included in the total of six repeats. **Audits count as a time taking a class unless prior written approval is obtained from a college academic advisor.**

Although transfer credit accepted by the department and the college may be applied toward meeting graduation requirements, the grades received will not be used in the USU GPA calculation.

Students must maintain a cumulative GPA of at least 2.67 and be a declared major to take MHR 3110 and a USU GPA of 2.0 to remain in good standing both in the college and the University. Students who are not making satisfactory progress toward graduation or who become ineligible to graduate will be suspended from the college.

For all aviation technology majors, the following academic regulations apply in addition to University regulations:

1. A minimum GPA of 2.4 must be maintained in technology/math/science/business courses required for, or used as technical electives in, the chosen major. University Studies courses are not included in this GPA calculation. To qualify for enrollment in Huntsman School of Business courses, students must have a cumulative grade point average of 2.67 or higher.

2. No more than 6 credits of *D* or *D+* credit may be applied toward meeting graduation requirements in technology/math/science/business classes.

3. College of Engineering courses may be repeated only once. Audits count as a time taking a class unless prior written approval is obtained from the department head. A maximum of six required or elective courses can be repeated in order to meet graduation requirements.

4. The *P-D-F* grading option may not be used in required or elective courses. (The *P-D-F* grading option is approved for University Studies courses.)

5. The academic regulations listed above (1-4) apply to required coursework and any technology/math/science/business course which could be used to satisfy graduation requirements for the chosen degree. That is, once a student completes a particular technical elective, it becomes a required course for that student.

6. Students in violation of departmental or college academic regulations, no longer eligible for graduation, or not making satisfactory progress toward a degree will have a registration hold placed on their record.

a. Students will be placed on probation (registration hold) if they (i) have more than 6 credits of *D* credit (see item 2 above); or (ii) have a GPA of less than 2.4 (see item 1 above).

b. The hold remains until they improve their standing by repeating classes to reduce the number of *D* credits to 6 or less, and/or by raising their GPA above 2.4. Students must meet with their advisor to have the hold removed.

The student must meet with a college academic advisor at least once each semester to work out a schedule having the primary goal of correcting the existing academic problems.

Internships

Juniors and seniors in the major have the opportunity to compete for an internship with Sky West Airlines, American Airlines, American Eagle, and others. Interns are selected by the airlines and spend one semester working off campus in a designated facility. They may be given the opportunity to fly jumpseat with current airline captains, fly training simulators, and have first-hand experience with airline operations.

Career Opportunities

Depending upon the national economy, the airline industry experiences surges and lulls in the demand for properly trained personnel. Job opportunities are presently limited with major airlines; however, ***regional airlines have been hiring on a regular basis***. This is an excellent time to begin aviation training in anticipation of the increased demand for pilots as the economy improves.

Research

A major component of the undergraduate upper-division curriculum is applied aerospace research. All seniors are required to propose and complete a research project dealing with a practical application of a problem encountered in Flight or Aviation Maintenance Technology. Many other departments of the University have willingly made available sophisticated equipment that allows research to be done in a competent manner.

Fees

In addition to regular tuition and fees, a special fee will be assessed all flight certification classes listed below. When a student enrolls in each flight certification, the fee is due with tuition payment. Course costs are based on average costs of ratings, and include stage check and FAA check ride fees. **All fees are subject to change.** For current fee structure, see website at: **http://www.ete.usu.edu/**

AV 2350	Private Pilot Certification	$7,739
AV 2510	Intermediate Flight	8,026
AV 2540	Instrument Pilot Certification I	4,706
AV 2550	Instrument Pilot Certification II	5,135
AV 2660	Commercial Pilot Certification	9,366
AV 2740	CFI Certification	5,734
AV 2860	CFII Certification	1,836
AV 2880	Multi-Engine Certification	3,563
	Total	**$46,105**

Elective Certification

ETE 5910	ST: Multi-Engine (MEI) Certification	$5,000

Medical Certificates

In accordance with the *Code of Federal Regulations, Title 14, Part 61.3*, all professional pilot students are required to obtain an FAA Medical Certificate. There are three classes of medical certificates which students may obtain: First Class, Second Class, and Third Class. Although *only* a Third Class Medical Certificate is required for student pilot operations at Utah State University, it is highly recommended that students obtain a First Class Certificate, in order to ensure that no medical conditions exist which would disqualify him or her from obtaining one at a later date. **Many pilot jobs *require* a First Class Medical Certificate.**

A medical certificate may be obtained from a certified Aviation Medical Examinar (AME). Although the cost varies according to the examiner and the type of physical sought (First, Second, or Third), the cost is approximately $70 to $100. Detailed requirements for each medical class and durations are explained in CFR Title 14, part 67. For further information, contact Flight Operations at (435) 787-1346.

Degrees and Programs Offered Through This Department

Aviation Technology—Maintenance Management: Bachelor of Science (BS)

Aviation Technology—Professional Pilot: BS

Engineering and Technology Education: BS and Master of Science (MS)

Academic Advisement

All students should contact their academic advisor for assistance with course selection, program planning, and meeting graduation requirements. If they do not know who their advisor is, students should contact their department, college, or the Office of University Advising.

Graduation Requirements: BS Degree in Aviation Technology—Professional Pilot

Minimum University Requirements*

Total credits	120
Grade point average (most majors require higher GPA)	2.00 GPA
Credits of *C*- or better	100
Credits of upper-division courses (#3000 or above)	40
USU credits	30
(20 of which must be upper division, including 10 required by major)	
Completion of approved major program of study	See department
Credits in minor (if required by department)	12
Credits in American Institutions (ECON 1500; HIST 1700, 2700, or 2710; POLS 1100; or USU 1300)	3
University Studies requirements	See below

*Colleges and departments may require more credits or a higher GPA. See requirements on this sheet.

University Studies Requirements for Aviation Technology—Professional Pilot Major

Note: Approved University Studies courses and requirements are listed in the back section of each semester's *Schedule of Classes*.

General Education Requirements (31-34 credits)

Competency Requirements (10 credits)

Communications Literacy (CL1 and CL2) (6 credits)

ENGL 1010 (CL1) (3 credits) or satisfactory AP, CLEP, IBO, ACT, or SAT score

AND

ENGL 2010 (CL2) (3 credits) or satisfactory IBO score

Quantitative Literacy (QL) (4 credits)

MATH 1050 (4 credits)

OR

One MATH or STAT course requiring MATH 1050 as a prerequisite

OR

Satisfactory AP, CLEP, IBO, ACT, or SAT score

Computer and Information Literacy (0 credits)

Passing grade on six computer and information literacy related examinations.

Breadth Requirements (18-20 credits)

Select at least one approved course from each of the following six categories: **American Institutions (BAI), Creative Arts (BCA), Humanities (BHU), Life Sciences (BLS), Physical Sciences (BPS),** and **Social Sciences (BSS)**. At least two of the six breadth courses must be University Studies courses with a **USU prefix** (excluding USU 1000, 1010, 1100, 3330, 4900, and 6900). (CLEP or AP credit may be used.) PHYS 1800, which is required for this major, fulfills the Breadth Physical Sciences requirement.

Exploration Requirement (3-4 credits)

Choose an additional class from one of the following General Education categories: QL, BAI, BCA, BHU, BLS, BPS, or BSS. CLIM 2000, which is required for this major, fulfills this requirement.

Depth Education Requirements

Communications Intensive (CI) (2 courses)

AV 4660, along with another course approved for CI credit, will meet this requirement.

Quantitative Intensive (QI) (1 course)

ETE 2300, a course taken for the major, will meet this requirement.

Depth Course Requirements (4 credits minimum, including 2 credits minimum completed in *each* of two courses)

Complete at least 2 credits in approved 3000-level or above courses from each of the following two categories: **Humanities and Creative Arts (DHA)** and **Social Sciences (DSS)**. MHR 3110, which is required for this major, fulfills the Social Sciences requirement.

Aviation Technology—Professional Pilot Curriculum (126 credits)

Suggested Semester Schedule

Freshman Year (30 credits)

Fall Semester (15 credits)	**Credits**
☐ **AV 1100** The Aviation Profession	1
☐ **AV 1130** Flight Principles	2
☐ **AV 2330** Private Pilot Ground School	4
☐ **AV 2350**[4] Private Pilot Certification	1
☐ **MATH 1050 (QL)**[6] College Algebra	4
☐ University Studies Breadth American Institutions (BAI) Course	3

Spring Semester (15 credits)	
☐ **AV 2170** Aircraft Systems	2
☐ **AV 2510**[4] Intermediate Flight	1
☐ **CLIM 2000 (BPS)**[3] The Atmosphere and Weather	3
☐ **ETE 2300 (QI)**[5] Electronic Fundamentals	4
☐ **MATH 1060** Trigonometry	2
☐ Elective courses	3

Sophomore Year (33 credits)[1]

Fall Semester (16 credits)	
☐ **AV 2180** Aircraft Hydraulic and Pneumatic Systems	2
☐ **AV 2520**[7] Instrument Pilot Ground School	4
☐ **AV 2540**[4] Instrument Pilot Certification I	1
☐ **ENGL 1010 (CL1)** Introduction to Writing: Academic Prose	3
☐ **MATH 1100 (QL)**[5] Calculus Techniques	3
☐ University Studies Breadth Life Sciences (BLS) course	3

Spring Semester (17 credits)	
☐ **AV 2430** Aircraft Electrical Systems and Components	2
☐ **AV 2550**[4] Instrument Pilot Certification II	1
☐ **AV 2620** Commercial Pilot Ground School	2
☐ **CLIM 3250**[7] Aviation Weather	3
☐ **ENGL 2010 (CL2)** Intermediate Writing: Research Writing in a Persuasive Mode	3
☐ Any Communications Intensive (CI) approved course	3
☐ University Studies Breadth Humanities (BHU) course	3

Junior Year (32 credits)

Fall Semester (16 credits)	
☐ **AV 2660**[4] Commercial Pilot Certification	1
☐ **AV 3010** National Airspace, Air Traffic Control, and Airport Administration	3
☐ **AV 3120** Aviation Law	3
☐ **AV 3140** Advanced Avionics Systems and Flight Simulation	3
☐ **AV 4280** Airline Management	3
☐ University Studies Breadth Creative Arts (BCA) course	3

Spring Semester (16 credits)	
☐ **AV 2720** CFI and CFII Ground School	3
☐ **AV 2880**[4] Multi-Engine Certification	1
☐ **AV 4490** Human Factors in Aviation Safety	3
☐ **AV 5400** Regional Jet Ground School I	4
☐ **MHR 3110 (DSS)**[2,3,8] Managing Organizations and People	3
☐ Elective course(s)	2

Senior Year (31 credits)

Fall Semester (14 credits)	**Credits**
☐ **AV 2740**[4] CFI Certification	1
☐ **AV 4660 (CI)** Flight Senior Project	3
☐ **AV 5410** Regional Jet Ground School II	4
☐ Elective course(s)	3
☐ University Studies Breadth Social Sciences (BSS) course	3

Spring Semester (17 credits)	
☐ **AV 2860**[4] CFII Certification	1
☐ **AV 5420** Advanced Regional Jet Simulation	3
☐ **PHYS 1800 (BPS)**[3] Physics of Technology	4
☐ Upper-division elective courses[2]	6
☐ University Studies Depth Humanities and Creative Arts (DHA) course	3

[1]Completion of the Computer and Information Literacy (CIL) exams with passing grades is required by the end of the sophomore year.

[2]Students should contact their advisor for a list of approved upper-division electives.

[3]MHR 3110 fulfills the University Studies Depth Social Sciences (DSS) requirement. PHYS 1800 fulfills the University Studies Breadth Physical Sciences (BPS) requirement. CLIM 2000 fulfills the University Studies Exploration requirement.

[4]Depending on weather and other factors, flying courses may be taken during semesters other than those indicated. It is imperative that students work with their advisors and flight instructor to determine the best arrangement for these courses.

[5]MATH 1050 is a prerequisite for ETE 2300 and MATH 1100.

[6]A Math ACT score of 23 or higher is required to enroll in MATH 1050. If Math ACT score is between 18 and 22, student should enroll in MATH 1010 first.

[7]Students should take CLIM 2000 prior to taking AV 2520 and CLIM 3250.

[8]All students must have a cumulative GPA of at least 2.67 and have professional status in order to be admitted to Huntsman School of Business classes.

Students must complete a total of 40 credits of stipulated upper-division coursework.

Departmental Honors in Aviation Technology—Professional Pilot (15 credits required)

To receive departmental honors in Aviation Technology—Professional Pilot, students must complete 3 credits of AV 4660, Flight Senior Project. Also, students must select 12 credits of AV or ETE Honors coursework, numbered 3000 or above.

A cumulative GPA of 3.30, as well as a GPA of 3.50 in upper-division major requirements and Honors coursework, are required for departmental honors. Students must also complete and present in a public forum an Honors thesis/project (e.g., a senior project presentation or student showcase).

For more information about departmental honors, contact the Honors Program, (435) 797-2715.

Requirement Changes

Graduation requirements shown on this sheet are subject to change. Students should check with their assigned advisor concerning possible changes.

Materials for Persons with Disabilities

This requirement sheet is available in digital format, recordings, or large print upon request to the USU Disability Resource Center.

For information contact

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