



**NEW PROGRAM PROPOSAL FORM**

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**Sponsoring Institution(s):** Ozarks Technical Community College

**Program Title:** Aviation Flight Technology

**Degree/Certificate:** Associate of Applied Science

**Options:** Click here to enter text.

**Delivery Site(s):** Ozarks Technical Community College

**CIP Classification:** 49.0102

\*CIP code can be cross-referenced with programs offered in your region on MDHE's program inventory [highered.mo.gov/ProgramInventory/search.jsp](http://highered.mo.gov/ProgramInventory/search.jsp)

**Implementation Date:** Fall, 2017

**Cooperative Partners:** Click here to enter text.

\*If this is a collaborative program, form CL must be included with this proposal

**AUTHORIZATION:**

Dr. Steven Bishop, Provost

Name/Title of Institutional Officer

Signature

Date

11-21-16

Renee Graves

417/447/8115

Person to Contact for More Information

Telephone



**STUDENT ENROLLMENT PROJECTIONS**

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Year	1	2	3	4	5
Full Time	7	10	12	13	12
Part Time	8	8	9	11	15
Total	15	18	21	24	27

Please provide a rationale regarding how student enrollment projections were calculated:

The ratio of part-time to full-time enrollment in professional programs at OTC has remained fairly steady over the past four years. We've used those ratios to compute FTEs. Initial enrollment was forecast using persons interested in starting flight school even before the program. The net increase of 3 students per year was based on advice from Mankato State University's aviation program experiences and recommendation.

Provide a rationale for proposing this program, including evidence of market demand and societal need supported by research:

The 2015 Boeing Pilot and Technician Outlook projects that 558,000 new commercial pilots – including 95,000 in North America alone – will be needed during the next 20 years. Having an active flight training program will provide a local source of trained pilots for the 30+ businesses that already base corporate aircraft here and provide higher numbers of takeoff/landings from training activity for the FAA Control Tower which is in Springfield, Missouri. Springfield in particular has seen a steady increase in corporate activity. In 2015, the Springfield-Branson National Airport opened a new \$6 million general aviation redevelopment area, which has seen a 10% increase in airport operations for the first half of 2016. Access to new pilots is such a critical need that the airport has offered space rent free for the first 3 years.

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**PROGRAM STRUCTURE**

A. Total credits required for graduation: 63

B. Residency requirements, if any:

C. General education: Total credits: 15

Courses (specific courses OR distribution area and credits):

Course Number	Credits	Course Title
ENG 101	3	Composition I
ENG 150	3	Technical Writing
COM 105	3	Public Speaking
MTH 138	3	Pre-Calculus Math
PLS 101	3	Political Science

D. Major requirements: Total credits: 45

Course Number	Credits	Course Title
AVI 102	3	Airline Operations
AVI 105	3	Aviation Weather
AVI 113	3	Flight I
AVI 114	3	Flight II
AVI 131	3	Commercial Pilot I
AVI 132	3	Commercial Pilot II
AVI 150	3	Aviation Ground Operations
AVI 203	3	Aircraft & Engine Components
AVI 213	3	Flight III
AVI 214	3	Flight IV
AVI 215	3	Aerodynamics
AVI 231	3	Commercial Pilot III
AVI 240	3	Air Traffic Control System
AVI 250	3	Air Transportation
CIS 101	3	Personal Computer Application

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E. Free elective credits:

3

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

Persons must pass the Federal Aviation Administration Private Pilot Knowledge Examination; FAA Commercial Pilot Knowledge Test, and Instrument computer examinations

G. Any unique features such as interdepartmental cooperation:

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Form PS – Program Structure



## PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

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Institution Name      Ozarks Technical Community College  
Program Name          Aviation Flight Technology  
Date    11/18/16

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

### 1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.

All flight lab students need to pass a flight physical with a Federal Aviation Association [FAA] designated Aviation Medical Examiner [AME]. A driver's license AND official birth certificate with raised seal OR a US Passport is necessary for Transportation Security Administration [TSA] verification purposes. Non-US citizens would need to undergo TSA processing

- Characteristics of a specific population to be served, if applicable.  
N/A

### 2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.  
Persons will need to be FAA-certified flight instructors.
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.  
Initially, OTC will not employ full time faculty for the purpose of the aviation program until student enrollment is at a sustainable rate. We estimate this to occur around year 3 or after from the program's start date. Thus, 100% of the classes will be taught by qualified adjuncts during year 1. We will continually gauge the need for full time faculty after each semester.
- Expectations for professional activities, special student contact, teaching/learning innovation.

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OTC will work closely with its advisory board for aviation to seek relevant and engaging professional development activities that support innovative teaching and learning. This includes industry recognized conferences, seminars, and best practices that support our intent to seek accreditation. OTC faculty are required to log at least 20 hours of professional development annually. Since the initial classes will be taught by adjunct instructors exclusively, OTC is committed to ensuring we hire the most qualified teachers available to staff each section.

### 3. Enrollment Projections

- Student FTE majoring in program by the end of five years.  
It is estimated FTE majoring in the program by the end of five years is 19.5.
- Percent of full time and part time enrollment by the end of five years.  
The percent of full time enrollment at the end of five years is anticipated to be 52% and part time enrollment at the end of five years is anticipated to be 49%.

### 4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.  
The number of graduates per annum for three years is 16, and the number of graduates for five years is 21.
- Special skills specific to the program.  
Private, commercial and instrument licensing
- Proportion of students who will achieve licensing, certification, or registration.  
The proportion of students who will achieve licensing, certification or registration is estimated at 95.6%
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.

In order to complete the program, students must successfully pass the FAA Private, Commercial, and Instrument computer examinations. We expect to exceed the national average of 84% completion

- Placement rates in related fields, in other fields, unemployed.  
Placement rates in related field is expected to be 95 percent.
- Transfer rates, continuous study.

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We anticipate 80% will transfer to a 4-year program

#### 5. Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. **If there are no plans to seek specialized accreditation, please provide a rationale.**

We plan to seek accreditation through the Aviation Accreditation Board International [AABI]. Initially OTC will join as an educator member. Accreditation is not possible until the first cycle of graduates complete the program. A starting date of August 2017 would make 2019 the earliest possible time to begin the accreditation process, which includes a self-study and site visit.

#### 6. Alumni and Employer Survey

- Expected satisfaction rates for alumni, *including timing and method of surveys*. We will use OTC's 180-day follow-up reporting system to gauge satisfaction.
- Expected satisfaction rates for employers, including timing and method of surveys. We will use OTC's 180-day follow-up reporting system to gauge satisfaction.

#### 7. Institutional Characteristics

- Characteristics demonstrating why your institution is particularly well-equipped to support the program.

OTC has access to phenomenal equipment and expertise. The Springfield-Branson National Airport is providing lab space for this program while the college provides space on-campus for non-lab courses; the airport tower is used for training air traffic controllers; there is a steady increase in corporate flight activity at the airport; the increase in corporate traffic has already resulted in a \$6 million general aviation redevelopment which includes auto access, taxiways and utilities access for 14 new hangars. OTC has access to planes with WAAS enabled GPS systems along with synthetic vision, terrain alerts, ADS-B satellite reporting and on-board Nexrad weather. The training aircraft have redundant analog versions of the instruments and avionics so that students can train for older instruments and equipment commonly found in general aviation aircraft and some smaller commercial operations. The aircraft are specifically designed with training in mind, complete with built-in memory and training aids so that instructors can reinforce habits and procedures used in commercial aviation. Since some students will transition to a 4-year education to qualify for commercial passenger lines, we will include using paper maps and whiskey compasses which are used by commercial passenger lines such as Delta, thus reducing any hurdles when seeking employment. We have access to an FAA approved Advanced Aviation Training Device [simulator] with full motion across all three axis along with control feedback [controls will simulate the actual pressures the pilot will feel in flight.] This means that training can still occur on bad weather days, only flying essential portions of a lesson without extra travel, time, and expense of getting to a specific point in space to being a maneuver,

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pause mid-flight, and brief or correct mistakes. It also can create weather and emergency conditions that would be unsafe to duplicate in reality. Additional growth in our region's aviation system cannot occur without a pipeline of trained pilots. OTC already has an exceptional reputation in the transportation mechanics arena and this is a healthy addition to that reputation.

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Form PG – Program Characteristics and Performance Goals