

New Program Report

Date Submitted: 05/29/2020

Institution Southeast Missouri State University

Site Information

Implementation Date: 8/16/2021 12:00:00 AM

Added Site(s):

Selected Site(s):

Southeast Missouri State University, One University Plaza, Cape Girardeau, MO, 63701

CIP Information

CIP Code: 490102

CIP Description:

A program that prepares individuals to apply technical knowledge and skills to the flying and/or navigation of commercial passenger and cargo, agricultural, public service, corporate and rescue fixed wing aircraft. Includes instruction in principles of aircraft design and performance, aircraft flight systems and controls, flight crew operations and procedures, radio communications, navigation procedures and systems, airways safety and traffic regulations, and governmental rules and regulations pertaining to piloting aircraft. Programs may qualify individuals to sit for the FAA commercial and airline aircrew examinations.

CIP Program Title:

Airline/Commercial/Professional Pilot and Flight Crew

Institution Program Title: Professional Pilot

Degree Level/Type

Degree Level: Bachelor's Degree

Degree Type: Bachelor of Science

Options Added:

Collaborative Program: N Mode of Delivery Current Mode of Delivery

Classroom

Student Preparation



New Program Report

Special Admissions Procedure or Student Qualifications required:

Students are required to obtain a third-class FAA medical certificate prior to beginning their flight training.

Specific Population Characteristics to be served: n/a

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate: Appropriate FAA certifications and ratings and appropriate qualifications per HLC guidelines.

Estimate Percentage of Credit Hours that will be assigned to full time faculty: All aviation specific ground school courses are planned to be assigned to full-time faculty. Flight training will be conducted by appropriately certified and credentialed flight instructors.

Expectations for professional activities, special student contact, teaching/learning innovation: Maintain appropriate FAA certifications and currency within the discipline.

Year 1	Full Time: 10	Part Time: 0	
Year 2	Full Time: 30	Part Time: 5	
Year 3	Full Time: 45	Part Time: 10	Number of Graduates: 0
Year 4	Full Time: 60	Part Time: 10	
Year 5	Full Time: 80	Part Time: 10	Number of Graduates: 18

Student Enrollment Projections Year One-Five

Percentage Statement:

100.00

Program Accreditation

Institutional Plans for Accreditation: Aviation Accreditation Board International (AABI) in approximately 5 years

Program Structure

Total Credits:

121

Residency Requirements: 2 year https://semo.edu/residencelife/resources/residency-requirements.html

General Education Total Credits:

42

Major Requirements Total Credits: 79

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
See Attached	0	



New Program Report

Free Elective Credits:

Internship or other Capstone Experience: Flight Labs and FAA certifications

Assurances

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus, CBHEapproved service region or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program within the geographically applicable area.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

Contact Information

First and Last Name: Doug Koch

Email: dskoch@semo.edu

Phone: 573-986-6777

Proposed Professional Pilot Curriculum

Course #	Title	Credit Hours	
UI 100	Freshman Seminar	3	
MN220	Engineering Economic Analysis (Social & Beh)	3	
Varies	Social and Behavioral Systems	3	
Varies	Constitution Requirement	3	
EN100	English Composition (Written)	3	
Varies	Written Expression	3	
SC105 or SC155	Oral Communication	3	
Varies	Humanities and Fine Arts	9	
Varies	General Education Elective	1	
PH 120	Intro to Physics I (Natural Science)	5	
MA 116	Pre Calc A (Math)	3	
CH181 or CH 180 or	Natural Science		
GO 110		3	
		General Education:	42
ET380	Vision and Sensor Systems	3	
ET381	Fundamentals of Flight	3	
ET384	UAS Law and Policy	3	
GO418	Meteorology	4	
IM300	Technical Communication	3	
IM301	Industrial Safety	3	
IM311	Statistical Process Control	3	
IM411	Total Quality Assurance	3	
IM419	Industrial Supervision	3	
AV 110	Private Pilots	3	
AV 111*	Private Pilots Lab	2	
AV 112*	Private Pilots Lab 2	1	
AV 210	Aviation Instrumentation	3	
AV 211*	Aviation Instrumentation Lab 1	2	
AV 212*	Aviation Instrumentation Lab 2	1	
AV 301	Aviation Safety	3	
AV 306	Aviation Management I	3	
AV 310	Commercial Pilot	3	
AV 311*	Commercial Pilot Lab 1	2	
AV 312*	Commercial Pilot Lab 2	1	
AV 390	Aircraft Design	3	
AV 395	Aircraft Performance	3	
AV 406	Aviation Management II	3	
AV 408	Flight Management	3	
AV 410	Flight Instructor	3	
AV 411*	Flight Instructor Lab 1	2	
AV 412*	Flight Instructor Lab 2	1	
AV 420	Jet Flight Management	3	
AV 430	Professional Flight	3	
AV 450	Aviation Capstone	3	
		Aviation Specific Classes:	51

Aviation Specific Classes:51Flight Training Labs:12

Total Hours: 121

Dr. Ken Jackson 830 Rannell St. Dexter, MO 63841 573-820-1604

May 28, 2020

RE: Letter of Support for Professional Pilot Program

Dear Provost Godard,

Please accept this letter of support for the proposed Professional Pilot Bachelor of Science degree. The demand for professional pilots continues to grow and is outpacing the supply in our region. Air transportation, as well as materials movement, shipping and logistics are growing within our region. In addition to high demand, salaries for professional pilots are considerably higher than the median salary of residents in this part of the country.

Southeast Missouri State University and Cape Girardeau are great locations to support a professional pilot program with a regional airport only a few miles from the campus. There are several major airports and transportation hubs within a few hours of Cape Girardeau, all providing excellent employment opportunities for graduates and support of the program in the form of advisory boards, guest lecturers, and experiential learning opportunities.

I am supportive of the proposal by Southeast Missouri State University to offer a Professional Pilot program. I believe there is a genuine need, and the students in our region will benefit from the availability of this academic program.

Please do not hesitate to contact me if you have additional questions.

Kind regards,

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Dr. Ken Jackson



May 28, 2020

The Honorable Zora Mulligan Commissioner Missouri Department of Higher Education 205 Jefferson Street P.O. Box 1469 Jefferson City, MO 65102

RE: Southeast Missouri State University Professional Pilot Bachelor of Science

This document provides a brief narrative on the need for the program as well as how it fits within our mission, while maintaining minimal cost. If additional information is needed, please do not hesitate to contact me.

Professional Pilot Program Demand

The regional, national, and international demand for professional pilots continues to grow. According to the Bureau of Labor Statistics, nationally there is an expected growth of approximately 4.6% up to 2028. The median wage for the occupational category is \$140,340. A regional analysis through EMSI examining the demand in Missouri and Illinois, reflects similar median salaries, \$140,601, and lists this area as a "hotspot" for this type of talent. The number of pilots age 55 and older is higher in our region than the national average. The EMSI data goes on to show that there were 1218 job openings posted in 2018 with only 63 candidates completing (graduating) from programs in the region.

The Bachelor of Science, Professional Pilot program will require a minimum of 121 credit hours of instruction. Forty-two hours of general education coursework are included in the total hours required. The program will be launched with minimal expense by structuring it similarly to several other professional pilot programs that contract out the flight instruction and aircraft ownership. The flight company will own the aircraft and be responsible for maintaining those aircraft per the contractual guidelines and FAA standards.

Mission Alignment

Southeast Missouri State University provides student-centered education and experiential learning with a foundation of liberal arts and sciences, embracing a tradition of access, exceptional teaching, and commitment to student success that significantly contributes to the development of the region and beyond. The Professional Pilot program aligns with our mission and is very much an experiential learning opportunity that will heavily instill the sciences and critical theory related to flight as well as the well-rounded liberal arts experiences that support the need soft-skills and well roundedness required to succeed in the industry.

Needs of the Region

The Southeastern region of Missouri is in close proximity to several population hubs with a high demand for commercial pilots. The Professional Pilot program will draw students from the boot heel region as well as south St. Louis. The program will also be very attractive to out of state students from areas such as Memphis, Nashville and parts of Southern Illinois and Northern Arkansas.

As stated earlier, current EMSI data shows demand far outpacing the number of completers from the region. EMSI states the average number of openings annually in the states of Missouri and Illinois combined are 1,357. The University of Central Missouri Professional Pilot program produced 24 completers in 2018 and 13 in 2019. Southern Illinois University – Carbondale had 38 completers in 2018. Southeast's addition of a Professional Pilot program will help offset this critical need for pilots in the region.

Builds Upon Existing Programs and Expertise

The Professional Pilot Program will build upon the Unmanned Aircraft Systems (UAS) Bachelor of Science Program currently offered at Southeast. The two programs will have faculty that overlap as well as some common courses. The Professional Pilot Program will introduce courses of study that will be adopted and required with the UAS program, strengthening the program and increasing its technical content.

Launched with Minimal Expense

The Professional Pilot BS will be modeled after programs which maintain fulltime faculty who provide on-campus instruction of ground school coursework, oversee FAA certification requirements, and provide oversight of the Professional Pilot program. The major expenses of many pilot program are for the aircraft, aircraft maintenance, and flight instruction. SEMO is modeling its Professional Pilot Program from other, longstanding programs such as Minnesota State University – Mankato's aviation program and will contract out the flight instruction portion of the program.

We will launch the program with one lead faculty member and our faculty teaching in the UAS program. In year three, we anticipate adding an additional faculty member to support the growth of the program. Cost is also minimized by being able to utilize the Cape Girardeau Regional Airport as opposed to having to own and maintain our own airport facilities. The Cape Girardeau Regional Airport is owned by the City of Cape Girardeau and is approximately five miles from Cape Girardeau. It is a full-service airport currently offering commercial flights and has the capacity and resources to handle the addition of the Professional Pilot program.

Sincerely,

hind him

Mike Godard, Ph.D. Provost

CITY of CAPE GIRARDEAU

May 28, 2020

RE: Letter of Support for Professional Pilot Program

Dear Provost Godard,

Please accept this letter of support for the proposed Professional Pilot Bachelor of Science degree. The demand for professional pilots continues to grow and is outpacing the supply in our region of the country. Air transportation, materials movement, shipping, and logistics are all growing within our region and several major corporate hubs are located within a short distance of Cape Girardeau. Business would benefit greatly from this new academic program.

The Cape Girardeau Regional Airport currently offers commercial flights and has the capacity to support the airport and logistic needs of the professional pilot program. The airport has two runways, 10/28 which is 6,500 X 150ft and 02/20 which is 4,000 X 100ft, refueling capabilities, as well as hangar and office space that is available.

I am in support of the proposal and looking forward to working with Southeast Missouri State University as we collaborate on meeting this important workforce need.

Please do not hesitate to contact me if you have additional questions.

Kind regards,

Katrina Amos, C.M. Airport Manager Cape Girardeau Regional Airport



Margaret M. Vandeven, Ph.D. • Commissioner of Education

205 Jefferson Street, P.O. Box 480 • Jefferson City, MO 65102-0480 • dese.mo.gov

June 3, 2020

Dr. Carlos Vargas President Southeast Missouri State University One University Plaza, Mail Stop 3300 Cape Girardeau, MO 63701

RE: Letter of Support for Professional Pilot Program

Dear Dr. Vargas:

Please accept this letter of support from the Missouri Department of Elementary and Secondary Education for the proposed Professional Pilot Bachelor of Science degree. The demand for professional pilots continues to grow. Air transportation, as well as materials movement, shipping and logistics are growing within our region.

The Missouri Department of Elementary and Secondary Education supports Governor Parson in his mission to improve workforce development, infrastructure improvement and job creation. This career pathway for students has the potential to support these objectives while leading to a fulfilling and rewarding career.

I support Southeast Missouri State University's goal to offer a Professional Pilot program. I believe there is a genuine need, and the students in this region will benefit from the availability of this academic program.

Please do not hesitate to contact me if you have additional questions.

Sincerely,

Jarge Vandeven

Margie Vandeven Commissioner of Education