



DEPARTMENT OF
HIGHER EDUCATION &
WORKFORCE DEVELOPMENT

New Program Report

Date Submitted:

10/29/2021

Institution

Ozarks Technical Community College

Site Information

Implementation Date:

8/21/2023 12:00:00 AM

Added Site(s):

Springfield-Branson National Airport, 500 W Kearney St., Springfield, MO 65803

Selected Site(s):

Ozarks Technical Community College, 1001 E. Chestnut Expressway, Springfield, MO, 65802.

CIP Information

CIP Code:

470608

CIP Description:

A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of aircraft powerplant and related systems. Instruction includes engine inspection and maintenance, lubrication and cooling, electrical and ignition systems, carburetion, fuels and fuel systems, propeller and fan assemblies.

CIP Program Title:

Aircraft Powerplant Technology/Technician

Institution Program Title:

Aviation Airframe and Powerplant Technician

Degree Level/Type

Degree Level:

Associate Degree

Degree Type:

Associate in Applied Science

Options Added:

Collaborative Program:

N

Mode of Delivery

Current Mode of Delivery

Classroom

Student Preparation

Special Admissions Procedure or Student Qualifications required:

There will be no special admission procedures or student qualifications required.



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Specific Population Characteristics to be served:

n/a

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:

Faculty who will be teaching these courses will need at least the minimum certification as an Airframe and/or Powerplant mechanic (either or both). Program faculty will also need industry experience in one of these areas to be considered for a teaching assignment.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:

It is estimated that 100% of credit hours will be assigned to full time faculty.

Expectations for professional activities, special student contact, teaching/learning innovation:

Full time faculty are required to obtain at least 20 hours of professional development annually as per college guidance. In addition, the program faculty will be required to be current in their recent experience requirements under Federal Aviation Regulation (FAR) 65.83 and meet requirements for Aviation Maintenance Technician Schools as found in FAR part 147. Program faculty will also be required to utilize our current Learning Management System, which is Canvas.

Student Enrollment Projections Year One-Five

Year 1	Full Time: 12	Part Time: 0	
Year 2	Full Time: 15	Part Time: 0	
Year 3	Full Time: 18	Part Time: 0	Number of Graduates: 22
Year 4	Full Time: 21	Part Time: 0	
Year 1	Full Time: 12	Part Time: 0	
Year 2	Full Time: 15	Part Time: 0	
Year 3	Full Time: 18	Part Time: 0	Number of Graduates: 22
Year 4	Full Time: 21	Part Time: 0	
Year 5	Full Time: 25	Part Time: 0	Number of Graduates: 27

Percentage Statement:

95.00

Program Accreditation

Institutional Plans for Accreditation:

There are no plans to seek specialized accreditation; however, the program requires FAA approval and the college is a member of the Aviation Technician Education Council (ATEC).

Program Structure

Total Credits:

79



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Residency Requirements:

15 of the last 30

General Education Total Credits:

15

Major Requirements Total Credits:

64

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
APT 122	4	Airframe Non-Metal Structures
APT 270	5	Advanced Powerplants
APT 200	5	Powerplant Theory and Repair
APT 260	2	Propeller Systems
APT 250	3	Ignition and Starting Systems
APT 103	2	Aviation Mathematics
APT 101	4	AVI Maintenance Foundations
APT 170	2	Utility and Safety Systems
APT 104	2	Fundamentals of Electricity
APT 160	3	Aircraft Landing Systems
CIS 101	3	Technology & Digital Literacy
APT 140	2	Aircraft Electrical Systems
APT 120	5	Airframe Design and Assembly
APT 240	4	Engine Management and Support
APT 210	3	Induction, Cooling, & Exhaust
APT 102	4	Materials and Processes
APT 180	2	Fundamentals of Avionics
APT 150	2	Aircraft Fluid Systems
APT 205	3	Engine Fuel and Lubrication
APT 121	4	Airframe Metal Structures

Free Elective Credits:

0

Internship or other Capstone Experience:

N/A

Assurances



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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 or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program of another Missouri institution in accordance with 6 CSR 10-4.010, subsection (9)(C) Submission of Academic Information, Data and New Programs.

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: RENEE
GRAVES

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Springfield-Branson
NATIONAL AIRPORT

2300 n airport blvd ste 100
springfield missouri 65802
p 417.868.0500 f 417.868.0501

Statement of Support for Aviation Maintenance Training Program

This letter is to express strong support for efforts underway by Ozark Technical Community College (OTC) to establish an academic Aviation Maintenance Training Program at the Springfield-Branson National Airport (SGF). There is growing demand within the local and national aviation industry for trained Airframe & Powerplant Mechanics (A&P) certified by the Federal Aviation Administration (FAA).

SGF has grown rapidly during the past decade and there are currently several based companies struggling to find enough A&P maintenance personnel. These include Worldwide Aircraft Services, OzAir/Burgess Aircraft Management Services, Aviation Enterprises, and the 1107th Theater Aviation Sustainment Group of the Missouri Air National Guard. All of these entities have expressed workforce availability issues/concerns. SGF is bouncing back from the pandemic and all areas (airline, corporate, cargo, and military) are near or are exceeding pre-pandemic activity levels.

Envoy Air, which is a wholly owned subsidiary of American Airlines (AA), has operated a small maintenance base at SGF for 15 years servicing small regional jets, such as Embraer 140/145 aircraft. SGF reached an agreement with AA recently and is currently constructing a new state-of-the-art 60,000 square foot maintenance facility that will be completed in late 2021. It is designed to maintain larger next generation Embraer 175 aircraft, and will accommodate three within the hangar and three on the adjacent ramp area. This will greatly expand AA's maintenance capability and workforce demand at SGF for decades to come.

OTC has a proven track record of successfully developing and implementing aviation training programs at SGF. Their Professional Pilot Training Program started in 2017 with three training aircraft and 20 students has already grown to over 60 active students and 9 training aircraft. The City of Springfield and Airport Board are very supportive of OTC's continued growth at SGF and establishment of an Aviation Maintenance Training Program to help address existing and future workforce needs.

Thank you for the opportunity to comment on this important issue.

Sincerely,

Brian C. Weiler, A.A.E.
Director of Aviation

CIP: 47.0608 Aircraft Powerplant Technology/Technician

Market: Southwest Missouri

Total Score: 13

Percentile: 96

Student Demand
Score: 4 | Percentile: 85

Category	Pct	Criterion	Value	Score
	0	Inquiry Volume (12 Months)	0	0
	10	Inf Page/View (12 Months)	0	NS
	20	Google Search Volume (3 Months)	NA	NS
Size	0	On-ground Completions at In-Market Institutions	0	0
	35	Online Completions by In-Market Students	0	2
	38	Sum of On-ground and Online Completions	0	1
	4	Inquiry Volume YoY Change (Units)	-1	-1
	90	Google Search YoY Change (Units)	NA	NS
	20	Completion Volume YoY Change (Units)	0	2
	20	Inquiry Volume YoY Change (%)	-1	NS
	72	Google Search YoY Change (%)	NA	NS
	72	Completion Volume YoY Change (%)	35%	0

Competitive Intensity
Score: 1 | Percentile: 50

Category	Pct	Criterion	Value	Score
	74	Comps with Graduates**	0	4
	74	National Online Institutions (Units)**	1	NS
	99	Institutions with Online In-Market Students**	0	NS
	99	Institutions YoY Change (Units)**	0	-3
Volume of Competition	NA	Average Completions by Local Institution	NA	NS
	NA	Median Completions by Local Institution	NA	NS
	NA	YoY Median Program Change (Units)	NA	NS
	NA	YoY Median Program Change (%)	NA	NS
	53	Nat'l Online % of Institutions	1%	NS
	66	Nat'l Online % of Completions	5%	NS
Market Saturation	NA	Average Cost per Inquiry**	NA	NS
	NA	Google Search * Cost per Click**	NA	NS
	NA	Google Competition Index**	NA	NS

Total Percentile 0 20+ 40+ 70+ 90+ 95+ 98+ 100

Total Score 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 100

Employment
Score: 8 | Percentile: 84

Category	Pct	Criterion	Value	Score
Size (Direct Prep)	79	Job Postings Total (12 Months)*	12	2
	71	BLS Current Employment	73	2
	70	BLS Annual Job Openings*	7	0
Size (General Ed)	56	BLS Share of Generalist Employment*	1	0
Growth (Direct Prep)	19	BLS Share of Generalist Employment*	0	NS
	18	BLS 1-Year Historical Growth*	-25%	-1
	24	BLS 3-Year Historic Growth (CAGR)*	-5%	-1
	32	BLS 10-Year Historic Growth (CAGR)*	6.4%	NS
Saturation (Direct Prep)	78	Job Postings per Graduate*	36.5	2
	74	BLS Job Openings per Graduate*	12.2	2
Wages (Direct Prep)	64	BLS 10th-Percentile Wage*	\$35,360	0
	65	BLS Mean Wage*	\$58,840	0
	69	Nat'l ACS Wages (Age <30)	\$46,887	NS
National American Community Survey	34	Nat'l ACS Wages (Age 36-50)	\$70,895	NS
Bachelor's Degree Outcomes	4	Nat'l ACS % with Any Graduate Degree	13%	NS
	3	Nat'l ACS % with Masters	10%	NS
	16	Nat'l ACS % with Doctoral Degree	3%	NS
	65	Nat'l ACS % Unemp. (Age <30)**	1%	NS
	84	Nat'l ACS % Unemp. (Age 36-50)**	3%	NS
	55	Nat'l ACS % in Direct Prep Jobs	3%	NS

CIP Description:

A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of aircraft powerplant and related systems. Instruction includes engine inspection and maintenance, lubrication and cooling, electrical and ignition systems, carburetor, fuel and fuel systems, propeller and fan assemblies.

** Color Scale in Reverse

*** Color Scale in Reverse

Demand Fit
Score: 0 | Percentile: 100

Category	Pct	Criterion	Value	Score
NHEER Title	100	Cost Index**	1.02	NS
2 Year	100	Student Faculty Ratio	1.00	NS

National Completions by Level
Score: 0

Award Level	Completions (National)	Completions (Market)	Inquiries (Market)
Certificate	177%	15%	100%
Associate	4%	41%	NA
Bachelor	0%	41%	NA
Postsecondary Certificate	0%	0%	NA
Master	0%	3%	NA
Post-Enslers Certificate	0%	0%	NA
Doctoral	0%	0%	NA
Unknown	0%	0%	NA

National Workforce Ed. Attainment
Score: 0

Award Level	BLS Educational Attainment
No College	33%
Some College	36%
Associates	19%
Bachelors	10%
Masters	2%
Doctoral	0%

- * - Google search, employers data and Jobs Per Grad Ratio do not filter by award level.
- ** - Color scale in reverse.
- *** - No data available/not computed/rounded.
- NA - Not Applicable
- NS - Not Significant
- 2-yr - Associates & certificate programs only.
- PCTL - Percentile

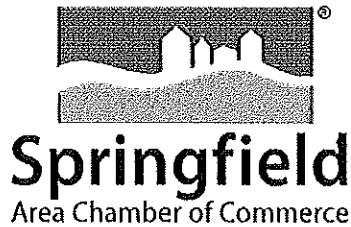
OZARKS TECHNICAL COMMUNITY COLLEGE

Statement of Need for:

- Associate of Applied Science in Aviation Airframe and Powerplant Technician (CIP 47.0608)
- Certificate in Aviation Airframe Maintenance Technician (CIP 47.0607)
- Certificate in Aviation Powerplant Maintenance Technician (CIP 47.0608)
- Certificate of Specialization in Aviation General Technician (CIP 47.0607)

Feasibility and Economic Need:

- This program will create a Federal Aviation Administration certified Airframe and Powerplant Maintenance degree program to serve the growing regional need for aircraft mechanics.
- This program represents a partnership with the Springfield-Branson National Airport at which it would be located.
- A market analysis conducted by BKD shows very strong student and employment demand for this program in southwest Missouri.
- The Missouri Economic Research and Information Center (MERIC) projects there will be 164 annual openings for aircraft mechanics in the state through 2028.
- Envoy (American Airlines regional carrier) recently chose the Springfield-Branson National Airport to locate their maintenance hub with expanded employment:
<https://www.envoyair.com/2021/02/08/envoy-to-move-to-new-maintenance-facility-in-springfield-sgf/>
 - The state's annual job openings forecast was created prior to this announcement, so would not include the jobs this relocation will create.
- The college hired a research firm to conduct a market analysis of its current and potential programs. This analysis identified the A&P program as one of the top programs needed for the region – placing it in the 84th Percentile of programs based on employment demand. Additionally, student demand is high, placing in the 85th Percentile.



"Everywhere Should Be Like This"

July 7, 2021

Senator Roy Blunt
260 Russell Senate Office Building
Washington, DC 20510

Dear Senator Blunt:

As the principal advocate for business in the Springfield region, the Springfield Chamber of Commerce strongly supports a budget request to help fund efforts by Ozarks Technical Community College to establish an academic Aviation Maintenance Training Program at the Springfield-Branson National Airport.

Recently, Envoy Air, a wholly-owned subsidiary of American Airlines announced the construction of a new maintenance base in Springfield. This new facility will allow AA to relocate from their existing facility at SGF in order to maintain larger, 76-seat regional jets creating 30 additional mechanic jobs in the process. This also leaves a smaller hanger, capable of maintaining 50-seat regional jets available for another maintenance operation. Interest in the facility has been strong and Springfield is a strong contender for another commercial airline maintenance operation. When this is added to the already existing maintenance operations at SGF and the Missouri National Guard's helicopter repair operations, the demand for Airframe and Powerplant mechanics will only be met by developing a training program in our community.

Additionally, occupational data from the Missouri Economic Research and Information Center shows a strong demand for licensed airframe mechanics in our state, which will only increase with Envoy and others. OTC's request of \$2.5 million in one-time funding for training equipment would allow them to create an FAA certified A&P Maintenance program to meet this need. Locating this facility at SGF alongside Envoy and other employers would allow for close partnerships and an innovative approach to meeting regional workforce needs.

We feel the proposed project would be an excellent use of funds to train citizens for quality jobs that will sustain families now and into the future. Thank you for the opportunity to provide input into this process.

Sincerely,

Matt Morrow
President