

# UCC 2023-4-5. Programs Agenda:635

## Committee University Undergraduate Curriculum Committee

### Notes

Meeting date - April 5, 2023, 2:30 - 4:30 pm, 259 Allyn Hall

Due to the number of persons attending the meeting it was moved to 240 Allyn. The committee continued to meet until 5:30 pm.

Attendance: BSOM rep - Sheri Gladish (remote), CECS rep - Michelle Cheatham, CHEH rep - Barb Dunaway - Chair, COLA rep - Sarah McGinley, COSM rep - Patrick Sonner, LAKE rep - Diane Huelskamp (remote), RSCOB rep- Mike Bernstein, Provost Reps - Wafa Hozien (Remote), Carol Loranger, & Bruce Mackh, Registrar - Lisa Runyan (Remote), Assistant Registrar - Laura Siegmann, Guests: Kim Everhart - Office of Financial Aid, Jim Denniston - Dean of CHEH, Marty Sexton - Associate Dean of CHEH, Mick Phillips, Chief Flight Instructor of First Flight, Craig Castle, Flight Instructor First Flight & Adjunct Faculty WSU, Glenn Crawford, Owner of First Flight, Noeleen McIlvenna - WSU Union Representative, Beth Hersman - Chair of KNH in CHEH (Remote)

I. Approval of Activity Report/ Minutes - Past agenda and notes approved. Any corrections to the agenda or notes from the month's meeting should be brought to the attention of the committee chair.

II. Review of proposals - 2 agendas for the month.

All proposals listed below were reviewed and discussed by the committee faculty members and other participants at the meeting. All were approved and will be moved forward.

The UCC faculty members want to send comments to the Faculty Senate regarding the Aviation Degrees.

\* The UCC has felt pressured to hurry the review and approval of all these proposals. These will be approved and moved forward outside of the times lines for curricular actions that were established at the beginning of the academic year and publicized. It is felt that other programs have adhered to these timelines and not been extended the consideration of submitting proposals late.

\* If this "fast track" approach to curricular approvals is to be undertaken in the future there should be some notation on the process of beginning that procedure, completing the approvals that will follow, and any limitations should be noted as well.

\* The Aviation program should have a full-time faculty member with a degree in the field of aviation that is current in the field and research.

\*\*\* Continued on agenda UCC 2023-4-5 Courses Agenda:636

III. Other business - We will consider the need for the final April meeting at the next meeting. Items will not be purged, from the system, but it would be nice to move them along before summer.

IV. Next meeting - scheduled for April 26, 2023, from 2:30 - 4:30 in room 259 Allyn Hall. Agendas will be distributed one week prior. It will be determined later if this meeting will be necessary depending on the number of proposals in the work queue.

Total Proposals 7

## Aviation Science/Tech, AAS

y 2023-2024 New Undergraduate Program (degree, major, minor, licensure, or endorsement) v2

### GENERAL INFORMATION

Registrar Approval New Program Deadlines	Fall 2023	Spring 2024
Offered in Fall 2023 & in the 2023-2024 catalog	4/1/2023	4/1/2023

Please complete a separate form for each request. **Note that new degree and major programs require approval by the Ohio Department of Higher Education (ODHE).** See the [ODHE](#) website for more information. There is an [additional section](#) below for new degrees or majors. Although supporting documents and additional information must be attached, it will not replace the required fields on this proposal.

The following [required forms](#) must be attached (Click the paperclip tab from the Proposal Toolbox on the right side) and sent to the Provost:

- 1) [Initial Inquiry](#) (submit after college curriculum committee approval);
- 2) [ODHE Full Proposal](#) (submit prior to University Undergraduate Curriculum Committee approval);
- 3) [Financial Impact New Enrollment](#) (submit after Department Curriculum Committee approval); and
- 4) [Market Analysis](#) or alternate source (submit prior to department curriculum committee)

**ALL USERS: Please expand "Proposal Help" (under proposal title) for "What can I do next?" details.** To edit a field, click **once** in the desired field and **save** after each change.

Curriculog Type\*  Program  
 Shared Core

**ORIGINATORS:** To use a blank or existing program as a template, click the **import button** above and select the DRAFT Academic Catalog. Add "Name" filter and type in the program name or "Undergraduate Degree Program" (blank template) and search. Save.

Name: Major, Degree or Credential

Examples: English, B.A. or Reading License

Name\* Aviation Science/Tech, AAS

- Type of Request\*
- New degree designation (A.S., B.A., B.F.A., etc.) and major
  - New major within an existing degree
  - New minor
  - New licensure program or endorsement

If an endorsement, list related degree

Department or Program for approval process\* Kinesiology and Health

College\* Health, Education, and Human Services, College of

Catalog Display\* College of Health, Education, and Human Services

Collaboration with another department, college, program, or institution?\*  Yes  No

If yes, please list First Flight Aviation, 10600 N. Springboro Pike Miamisburg, OH 45342

Published Program Length (in Years)\* 2

Requested Effective Term\*  Fall  Spring

Year\* 2024

Mode of Delivery\*  Face-to-face (<50% Online)  50%-79% Online  80%-99% Online  100% Online

Location Offered\*  Dayton Campus  Lake Campus  Off-Campus in Ohio  Off-Campus outside Ohio  Off-Campus outside U.S.

Please list each off-campus location where courses in this program may be offered (or N/A)\* First Flight Aviation, 10600 N. Springboro Pike Miamisburg, OH 45342

Is 50% or more of the program offered off-campus?\*  Yes  No

**If this program will be offered off-campus, how will services be available to students (e.g., advising, tutoring, counseling, and financial aid)?**

Students will still be required to complete Wright State Core classes on campus and will have full access to all student support services.

**Is this program accredited? If so, by whom?\***

no

## **ANALYSIS OF MARKET DEMAND**

**Explain and quantify the needs addressed by this program, and present evidence that the program fulfills these needs**

1) answer questions below with evidence, or

2) upload answers in separate attachment

**Please provide a rationale regarding how student enrollment projections were calculated.\***

The predicted U.S. Pilot Shortage per year for the next 20 Years is 130,000. To meet growing demand, we'd need to train a staggering 87 new airline pilots every day for the next 20 years. In addition, the overall employment of airline and commercial pilots is projected to grow 13 percent from 2020 to 2030, faster than the average for all occupations. Based on the market demand we expect to have a competitive admission of 25-30 students in the first cohort. It is predicated this cohort will grow to 30-50 students per year as resources allow.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Airline and Commercial Pilots, at <https://www.bls.gov/ooh/transportation-and-material-moving/airline-and-commercial-pilots.htm>

This program will provide more opportunity to increase enrollment across multiple programs. By opening up flight training as electives within other degree programs, graduates will be more marketable by having flight ratings. This is especially true with some of the engineering degrees. For these reasons and many more, we believe a university level flight training program, in the birthplace of aviation, will be very successful and increase enrollment.

**What is the economic need and workforce data related to the program?\***

It has been estimated that roughly 27,000 pilots are due to retire over the next decade at American Airlines, Delta Air Lines and United Airlines. Pilot Shortage magnitude, in the most likely scenarios, there is a global gap of 34,000 pilots by 2025. This could be as high as 50,000 in the most extreme scenarios. In North America, with an aging pilot population and heavy use of early retirements, the shortage reemerges quickly and is projected to reach over 12,000 pilots by 2023 — 13 percent of total demand. However, Asia Pacific, with a faster growth trajectory will surpass this by the end of the decade with a projected shortage of 23,000 pilots by 2029.

Source: <https://www.oliverwyman.com/our-expertise/insights/2021/mar/after-covid-19-aviation-faces-a-pilot-shortage.html>

**Provide information on jobs available as a result of successfully completing the certificate or degree: job titles, job outlook/growth, and salaries.\***

An Airline Pilot career is one of the most lucrative professions, and it also includes many perks. Average pilot income first year including signing bonuses is \$74,926. Some of the perks include free airline travel, great retirement benefits, medical and loss of license insurance, significant time off and much more. Most pilots make well over 6 figure income working approximately 17 days per month. Free travel benefits as well as amazing retirement. When someone is considering becoming a pilot, they usually envision being either an Airline or Military Pilot. In reality, there are numerous pilot careers graduates can pursue after graduation. These careers include flying single engined planes for: Law Enforcement, Corporate or Charter operations, Cargo and Passenger Airlines, Government Contractors, Survey Pilots, Search and Rescue Operations.

## Program Description (REQUIRED)

Please include information using the following four required headings ("Heading 2") in the order presented below for consistency in the catalog. Select the "normal" format for the body of text under each heading. The information entered below will appear in the catalog as submitted, but may be edited for style guide consistency.

Program Description

Admission Requirements

Program Learning Objectives (see below)

Program Learning Outcomes (see below)

For More Information

Program Title with hyperlink

Department/School Title with hyperlink

College Title with hyperlink

For licensures, a statement needs to be made, such as 'This program meets partial fulfillment for \_\_\_ licensure in Ohio. To learn more about whether the program leads to licensure in other states, go to [\[Text with hyperlink\]](#).'

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## PROGRAM LEARNING OBJECTIVES

Program learning objectives communicate and signal what a student will learn as the result of the instruction they undertake across all courses in a program comprising a body of knowledge.

Normally, program learning objectives are written as, "students enrolled in the \_\_\_\_\_ program will learn to:"

## PROGRAM LEARNING OUTCOMES

Program Learning Outcomes are statements that communicate and signal what students have learned as the result of the instruction they received across all the courses in a program, which comprise a body of knowledge.

Normally, program learning outcomes are written, "as a result of their learning experience, graduates of the \_\_\_\_\_ program can:"

Program learning outcomes are the basis for the assessment of the program's success. Also, program learning outcomes map onto and support institutional learning outcomes, which are also directly linked to the institution's mission, vision, and values.

A program should have between three and five program learning outcomes. Finally, program learning outcomes describe the students' achievements or accomplishments at the completion of the program.

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[\\*Please refer to the Accreditation & Assessment guide as well.](#)

**Program description:**

The Aviation Science and Technology Associates of Applied Science program provides students with an education in aviation that prepares professional pilots who will be able to operate effectively within National and International Airspace Systems in the 21st century. This program prepares students for entry-level technical positions in the aviation industry. Students entering this program should have a strong desire to excel in aviation and acquire the skill sets of a professional pilot. This program is designed to accommodate students entering the program with or without previous flight experience and those students transferring from other universities. Graduates will be able to pursue entry-level careers that require an aviation-related degree flying single engine planes in areas such as: law enforcement, corporate or charter operations, cargo and passenger airlines, government contractors, survey pilots, and search and rescue operations.

**Admission Requirements:**

Successful completion of first semester courses (AVI2000, AVI2001, AVI2002, AVI2004, and AVI2010), GPA of 2.5 or better, obtain class 1 medical certificate, interview with First Flight check instructors and administration. Must be a United States citizen.

**Program Learning Objectives:**

Students enrolled in the Aviation Science and Technology Associate of Applied Science program will learn to:

1. Develop the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

**Program learning outcomes:**

As a result of their learning experience, graduates of the Aviation Science and Technology Associate of Applied Science program can:

1. Demonstrate the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

**For more information:**

- [Kinesiology and Health Sciences](#)
- [College of Health, Education, and Human Services](#)

**Program Requirements (REQUIRED)**

Use the following template when creating program requirements. Each of the following required headings is called a "core" in the template. The information entered below will appear in the catalog as submitted, but may be edited for style guide consistency.

Wright State Core Requirements

Required courses

Elective courses

Other requirements (if applicable)

Total: # Hours

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Undergraduate programs must be 120 credit hours. A minor is made up of at least 12 credit hours. For additional information, please refer to the policies for [Academic Standards and Curriculum](#).



**Program  
Requirements\***

**Wright State Core**

**16 hours**

**Element I: Communications**

<b>ENG 1100 Academic Writing and Reading</b>	<b>3</b>
<b>ENG 2100 Research Writing and Argumentation</b>	<b>3</b>

**Element II: Mathematics**

**3 credits**

**Element V: Social Science**

<b>PSY 1010 Introduction to Psychology</b>	<b>4</b>
<b>PSY 1010L Introduction to Psychology Laboratory</b>	<b>0</b>

**Element VI: Natural Science**

<b>PHY 1903 Physics of Flight [Right]</b>	<b>3</b>
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**Required Courses**

**37 hours**

<b>AVI 2000 Introduction to Aviation and Aviation Systems</b>	<b>3</b>
<b>AVI 2001 Private Pilot Ground School</b>	<b>3</b>
<b>AVI 2002 Private Pilot Flight Lab 1 [Right]</b>	<b>1</b>
<b>AVI 2004 Private Pilot Flight Lab 2 [Right]</b>	<b>1</b>
<b>AVI 2010 Air Traffic Control Basics [Right]</b>	<b>3</b>

AVI 2101 Instrument Rating Ground School [Right]	3
AVI 2102 Instrument Rating Flight Lab [Right]	1
AVI 2201 Commercial Pilot Ground School 1 [Right]	2
AVI 2202 Commercial Pilot Flight Lab 1 [Right]	1
AVI 2250 Aircraft Systems and Powerplants [Right]	3
AVI 2301 Commercial Pilot Ground School 2 [Right]	3
AVI 2302 Commercial Pilot Flight Lab 2 [Right]	1
AVI 2350 Aviation Safety and Accident Investigation [Right]	3
AVI 2375 Aviation Law and Regulations [Right]	3
PSY 3680 Aviation Human Factors [Right]	3
GEO 4000 Climate Meteorology	3

### Electives

7 hours

[Before]Suggested

ASM 1717 Humans and Machines at Extremes	4
KNH 2600 First Aid and CPR	2

### Total

60 credit hours

**Total # of Credit Hours\*** 60

**List all Integrated Writing courses in the major (minimum of 2)\*** AVI 2350, AVI 2375

**Do you want students to be able to select this major or minor in WINGS Express?\***  Yes  No

## FACULTY/PROGRAM STAFFING

**Name\*** Craig Castle, Mick Phillips, James Ferrari, Josh Warren, Curtis Liska, Derek LaBraie

**Discipline\*** Aviation

**Title\*** Adjunct

**Describe the credentialing requirements for faculty teaching in the program (e.g., degree requirements, special certifications or licenses, and experience).\***

There is no degree specific to being able to teach aviation courses, instead, instructors have to have certifications/experience appropriate to what they will be teaching. This pertains to AVI 2010, AVI 2020, AVI 2250, AVI 2350, and AVI 2375.

For those who teach AVI 2001, 2002, and 2004 (Private Pilot), or AVI 2201/2202, AVI 2301/2302, the certification levels needed are Certified Flight Instructor and Advanced Ground Instructor.

**Certified Flight Instructor** - 18 years of age or older, English proficient, Commercial Pilot certificate. Has passed 2 FAA written exams (Fundamentals of Instruction and Flight Instructor Airplane) and accomplished the aeronautical experience required by FAR 61.183, after which they successfully completed a Practical Exam on both teaching methods as well as flight training maneuvers from the instructor's position of the airplane. A CFI then has to continue ongoing training every 2 years to remain legal and viable as a competent instructor.

**Advanced Ground Instructor** - This is similar to CFI, subtracting the flight training and adding a tiny bit of instrument and helicopter knowledge. 18 years old, English proficient, Commercial Pilot certificate. Has passed the Advanced Ground Instructor knowledge exam.

For those who teach ground school and flight lab classes for AVI 2101/2102, they would need the Certified Flight Instructor- Instrument and Instrument Ground Instructor certifications.

**Certified Flight Instructor - Instrument** - 18 years of age, English proficient, Instrument and Commercial Pilot. Has passed the FII written exam as well as met the aeronautical experience requirements and taken the Practical Exam.

**Instrument Ground Instructor** - Very similar to the AGI, but with a lot more focus on the Instrument side of instruction.

## RESOURCES & FACILITIES

**Describe additional resources that will be needed to support the proposed program and provide a timeline for acquiring/implementing such resources.**

Adjunct Faculty and CHEH Academic Advising.

**Additional information if needed**

We would like to call this program Aviation Science and Technology, AAS but the line at the top did not allow me to write out the full name.

### New - Minors, Licensures, or Endorsements



Skip to the "[Acknowledgement of Completion](#)" below.

## **FOR NEW DEGREES OR MAJORS ONLY:**

Note that [new](#) degree or major programs require approval by the [Ohio Department of Higher Education \(ODHE\)](#).

## Program Assessment

Describe (below) the policies and procedures in place to assess and evaluate the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform students as they progress through the program, and initiatives used to track student success after program completion.

### Program Assessment

Description of measurements used: Students must fulfill all FAA requirements in each ground school and flight lab. The number of students attempting and passing the FAA written and practical (check ride) exams for each certification with comparison to the annual published pass rates.

Responsible person/group: The AVI flight assessments will be conducted by all check instructors at First Flight Aviation.

Frequency of data collection: program assessment will be completed annually. AVI check instructors will meet to share data and discuss student success and any changes that need to be made.

How results will be used to inform students: students will receive a license, certification, or rating every term based on completing and passing the ground school and flight lab they are taking.

Tracking student success after program completion: Following program completion, completion surveys will be given to all students.

## Measuring Student Success

Describe (below) the policies and procedures in place to measure individual student success in the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform the students as they progress through the program, and initiatives used to track student success after program completion.

### Student Success

Description of measurements used and policies in place: Students must fulfill all FAA requirements in each ground school and flight lab with an 80% or better. In addition, students must receive passing scores in all other coursework, maintain a 2.5 GPA, and must pass all AVI courses with a C or better. The number of students attempting and passing the FAA written and practical (check ride) exams for each certification with comparison to the annual published pass rates.

Responsible person/group: The AVI flight assessments will be conducted by all check instructors at First Flight Aviation. The program data will be collected and stored by the Program Director for program assessment.

Frequency of data collection: Data will be collected on each student once they complete the ground school and flight labs each semester.

How results are used to inform students as they progress: Within each ground school course are required stage checks that meet the requirements of the training course outlines. Students who are successful will pass all stage checks and end of course exams.

Initiatives to track student success after program completion: completion surveys will be given to all students who complete the program.

Are additional faculty needed to support this program?  Yes  No

If yes, provide a timeline for hiring. Adjuncts will be hired as needed for specific course offerings

Provide the number of existing faculty members available to teach in the proposed degree/major below.

Full-time 0

Less than Full-time 2

Provide an estimate of the number of faculty members to be added during the first two years of program operation below.

Full-time 0

Less than Full-time 8

Acknowledgment of Completion  I have reviewed this for publication in the catalog. The required forms are attached. If applicable, GPS changes will be addressed.



1. Validate and Launch
2. Save
3. To approve, select the Decisions tab  from the Proposal Toolbox (right side). Do not complete the section below.

**ADMINISTRATIVE USE ONLY - DO NOT COMPLETE**

**To be completed after Board of Trustees approval**

Attach signed Board of Trustees resolution.

Resolution #

Date of Approval

**To be completed by the Provost**

Attach Directive signed by Chancellor.

ODHE Directive #

Date of Approval

**To be completed by Financial Aid**

Eligible for Title IV funding:  Yes  No

**To be completed on the CIP step**

CIP 400102

CIP Description Airline/Commercial/Professional

CIP 490102

CIP Description Airline/Commercial/Professional  
Pilot and Flight Crew

**To be completed by Registrar**

**Approved Effective Term**  Fall  
 Spring  
 Summer

**Year**

**Banner Program Name**

**Banner Program Code**

**Banner Major Name**

**Banner Major Code**

**Concentration Name(s) and Code(s) if applicable**

**Degree Type**

**Program Type**

**Special Program Indicator**  Special Admission Associate Degree Program (A)  
 Bachelor's Degree Completion Program (B)  
 Preparatory Coursework Undergraduate (U)

**Status**

## Aviation Science/Technology BS

y 2023-2024 New Undergraduate Program (degree, major, minor, licensure, or endorsement) v2

### GENERAL INFORMATION

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Offered in Fall 2023 & in the 2023-2024 catalog	4/1/2023	4/1/2023

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Name: Major, Degree or Credential

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Name\* Aviation Science/Technology BS

- Type of Request\*
- New degree designation (A.S., B.A., B.F.A., etc.) and major
  - New major within an existing degree
  - New minor
  - New licensure program or endorsement

If an endorsement, list related degree

Department or Program for approval process\* Kinesiology and Health

College\* Health, Education, and Human Services, College of

Catalog Display\* School of Nursing, Kinesiology, and Health Sciences

Collaboration with another department, college, program, or institution?\*  Yes  No

If yes, please list First Flight Aviation, 10600 N. Springboro Pike Miamisburg, OH 45342

Published Program Length (in Years)\* 4

Requested Effective Term\*  Fall  Spring

Year\* 2024

Mode of Delivery\*  Face-to-face (<50% Online)  50%-79% Online  80%-99% Online  100% Online

Location Offered\*  Dayton Campus  Lake Campus  Off-Campus in Ohio  Off-Campus outside Ohio  Off-Campus outside U.S.

Please list each off-campus location where courses in this program may be offered (or N/A)\* First Flight Aviation 10600 N Springboro Pike, Miamisburg, OH 45342

Is 50% or more of the program offered off-campus?\*  Yes  No



**If this program will be offered off-campus, how will services be available to students (e.g., advising, tutoring, counseling, and financial aid)?**

On campus services will be available to all students in this program as they will be taking WSU core classes and several of their required aviation classes on the Wright State campus.

**Is this program accredited? If so, by whom?\***

No

## **ANALYSIS OF MARKET DEMAND**

**Explain and quantify** the needs addressed by this program, and present evidence that the program fulfills these needs

1) answer questions below with evidence, or

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**Please provide a rationale regarding how student enrollment projections were calculated.\***

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## Program Description (REQUIRED)

Please include information using the following four required headings ("Heading 2") in the order presented below for consistency in the catalog. Select the "normal" format for the body of text under each heading. The information entered below will appear in the catalog as submitted, but may be edited for style guide consistency.

Program Description

Admission Requirements

Program Learning Objectives (see below)

Program Learning Outcomes (see below)

For More Information

Program Title with hyperlink

Department/School Title with hyperlink

College Title with hyperlink

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A program should have between three and five program learning outcomes. Finally, program learning outcomes describe the students' achievements or accomplishments at the completion of the program.

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[\\*Please refer to the Accreditation & Assessment guide as well.](#)

**Prog Description,  
Admission  
Requirements, Prog  
Learning Objectives &  
Outcomes, and  
Prog/Dept/College  
Links\***

**Program description:**

The Aviation Science and Technology Bachelor of Science program provides students with an education in aviation that generates professional pilots who will be able to operate effectively within National and International Airspace Systems in the 21st century. This program prepares students to pursue an advanced career in the aviation industry that requires a degree and training in single and multi-engine operations, aviation instruction, and aviation management. This major stresses subjects associated with flight systems, propulsion, structures, and electronics. Students entering this program should have a strong desire to excel in aviation and will acquire the skill sets necessary to begin a career as a professional pilot in the airline industry. This program is designed to accommodate students entering the program with or without previous flight experience and those students transferring from other universities. Students will also become Certified Flight Instructors within the bachelors degree program, allowing them to acquire more flight hours.

**Admission Requirements:**

Successful completion of first semester courses (AVI2000, AVI2001, AVI2002, AVI2004, and AVI2010), GPA of 2.5 or better, obtain class 1 medical certificate, interview with First Flight check instructors and administration. Must be United States citizen.

**Program Learning Objectives:**

Students enrolled in the Aviation Science and Technology Bachelor of Science program will learn to:

1. Develop the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Utilize modern technology to effectively manage professional flight operations.
5. Demonstrate the skill sets necessary to begin a career as a professional pilot in the airline industry.

**Program learning outcomes:**

As a result of their learning experience, graduates of the Aviation Science and Technology Bachelor of Science program can:

1. Demonstrate the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Utilize modern technology to effectively manage professional flight operations.
5. Demonstrate the skill sets necessary to begin a career as a professional pilot in the airline industry.

**For more information:**

- [Kinesiology and Health Sciences](#)
- [College of Health, Education, and Human Services](#)

**Program Requirements (REQUIRED)**

Use the following template when creating program requirements. Each of the following required headings is called a "core" in the template. The information entered below will appear in the catalog as submitted, but may be edited for style guide consistency.

Wright State Core Requirements

Required courses

Elective courses

Other requirements (if applicable)

Total: # Hours

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Undergraduate programs must be 120 credit hours. A minor is made up of at least 12 credit hours. For additional information, please refer to the policies for [Academic Standards and Curriculum](#).

**Program Requirements\***

**Wright State Core**

**39 credit hours**

**Element I: Communication**

**6 hours**

<b>ENG 1100 Academic Writing and Reading</b>	<b>3</b>
<b>ENG 2100 Research Writing and Argumentation</b>	<b>3</b>

**Element II: Mathematics**

**3 hours**

**Element III: Global Traditions**

**6 hours**

**Element IV: Arts and Humanities**

**3 hours**

**Element V: Social Sciences**

**7 hours**

**Two courses from different social science categories**

<b>PSY 1010 Introduction to Psychology</b>	<b>4</b>
<b>PSY 1010L Introduction to Psychology Laboratory</b>	<b>0</b>

**Element VI: Natural Science**

**8 hours**

<b>ASM 1717 Humans and Machines at Extremes</b>	<b>4</b>
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## Additional Core

6 hours

<b>COM 1010 Essentials of Public Address</b>	<b>3</b>
<b>PHY 1903 Physics of Flight</b>	
<b>[Right]</b>	<b>3</b>

## Required Courses

63 credit hours

<b>AVI 2000 Introduction to Aviation and Aviation Systems</b>	<b>3</b>
<b>AVI 2001 Private Pilot Ground School</b>	<b>3</b>
<b>AVI 2002 Private Pilot Flight Lab 1</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 2004 Private Pilot Flight Lab 2</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 2010 Air Traffic Control Basics</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 2101 Instrument Rating Ground School</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 2102 Instrument Rating Flight Lab</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 2201 Commercial Pilot Ground School 1</b>	
<b>[Right]</b>	<b>2</b>
<b>AVI 2202 Commercial Pilot Flight Lab 1</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 2250 Aircraft Systems and Powerplants</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 2301 Commercial Pilot Ground School 2</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 2302 Commercial Pilot Flight Lab 2</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 2350 Aviation Safety and Accident Investigation</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 2375 Aviation Law and Regulations</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 3001 Certified Flight Instructor Ground School</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 3002 Certified Flight Instructor Flight Lab</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 3250 Air Traffic Control 2</b>	
<b>[Right]</b>	<b>3</b>
<b>AVI 3501 Instrument Instructor Ground School</b>	
<b>[Right]</b>	<b>2</b>
<b>AVI 3502 Instrument Instructor Flight Lab</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 3701 Multi Engine Commercial Ground School</b>	
<b>[Right]</b>	<b>2</b>
<b>AVI 3702 Multi Engine Commercial Flight Lab</b>	
<b>[Right]</b>	<b>1</b>
<b>AVI 3750 Advanced Aircraft Systems</b>	

[Right] AVI 4001 Multi Engine Instructor Ground School	4
[Right] AVI 4002 Multi Engine Instructor Flight Lab	2
[Right] AVI 4501 Professional Airline Pilot Ground School	1
[Right] AVI 4502 Professional Airline Pilot Flight Lab	3
[Right] GEO 4000 Climate Meteorology	1
[Right] KNH 2600 First Aid and CPR	3
[Right] PSY 3680 Aviation Human Factors	2
	3

**Elective Courses**

18 credit hours

Suggested -- Aviation Business Certificate - in development (9 credits)

**Total Hours: 120**

**Total # of Credit Hours\*** 120

**List all Integrated Writing courses in the major (minimum of 2)\*** AVI 2350, AVI 2375

**Do you want students to be able to select this major or minor in WINGS Express?\***  Yes  No

**FACULTY/PROGRAM STAFFING**

**Name\*** Craig Castle, Michael Phillips, Josh Warren, James Ferrari, Curtis Liska, Martin Ferrari, Derek LaBraie, Kenn Vallie

**Discipline\*** Aviation

**Title\*** Adjunct



**Describe the credentialing requirements for faculty teaching in the program (e.g., degree requirements, special certifications or licenses, and experience).\***

There is no degree specific to being able to teach aviation courses, instead, instructors have to have certifications/experience appropriate to what they will be teaching. This pertains to AVI 2000, 2010, AVI 2020, AVI 2250, AVI 2350, AVI 2375, AVI 3250, and AVI 3750.

For those who teach AVI 2001, 2002, and 2004 (Private Pilot), or AVI 2201/2202, AVI 2301/2302, AVI 3001/3002, the certification levels needed are Certified Flight Instructor and Advanced Ground Instructor.

**Certified Flight Instructor** - 18 years of age or older, English proficient, Commercial Pilot certificate. Has passed 2 FAA written exams (Fundamentals of Instruction and Flight Instructor Airplane) and accomplished the aeronautical experience required by FAR 61.183, after which they successfully completed a Practical Exam on both teaching methods as well as flight training maneuvers from the instructor's position of the airplane. A CFI then has to continue ongoing training every 2 years to remain legal and viable as a competent instructor.

**Advanced Ground Instructor** - This is similar to CFI, subtracting the flight training and adding a tiny bit of instrument and helicopter knowledge. 18 years old, English proficient, Commercial Pilot certificate. Has passed the Advanced Ground Instructor knowledge exam.

For those who teach ground school and flight lab classes for AVI 2101/2102, AVI 3501/3502, they would need the Certified Flight Instructor- Instrument and Instrument Ground Instructor certifications.

**Certified Flight Instructor - Instrument** - 18 years of age, English proficient, Instrument and Commercial Pilot. Has passed the FII written exam as well as met the aeronautical experience requirements and taken the Practical Exam.

**Instrument Ground Instructor** - Very similar to the AGI, but with a lot more focus on the Instrument side of instruction.

For those teaching AVI 3701/3702 and AVI 4001/4002, they will need the Multi Engine Instructor rating.

For those teaching AVI 4501/4502, they would need Certified Flight Instructor and Multi Engine Instructor ratings.

**Multi Engine Instructor:** 18 years of age, English proficient, Instrument and Commercial Pilot. Has met the aeronautical experience requirements and taken the Practical Exam for multi engine instructor rating.

## **RESOURCES & FACILITIES**

**Describe additional resources that will be needed to support the proposed program and provide a timeline for acquiring/implementing such resources.**

Adjunct Faculty and CHEH Academic Advising.

**Additional information if needed**

We would like to call this degree: Aviation Science and Technology, BS. The line at the top only let me put in a certain number of letters so I wasn't able to write out the whole name with the degree.

New - Minors, Licensures, or Endorsements



Skip to the "[Acknowledgement of Completion](#)" below.

**FOR NEW DEGREES OR MAJORS ONLY:**

Note that [new](#) degree or major programs require approval by the [Ohio Department of Higher Education \(ODHE\)](#).

**Program Assessment**

Describe (below) the policies and procedures in place to assess and evaluate the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform students as they progress through the program, and initiatives used to track student success after program completion.

**Program Assessment**

Description of measurements used: Students must fulfill all FAA requirements in each ground school and flight lab. The number of students attempting and passing the FAA written and practical (check ride) exams for each certification with comparison to the annual published pass rates.

Responsible person/group: The AVI flight assessments will be conducted by all check instructors at First Flight Aviation.

Frequency of data collection: program assessment will be completed annually. AVI check instructors will meet to share data and discuss student success and any changes that need to be made.

How results will be used to inform students: students will receive a license, certification, or every term based on completing and passing the ground school and flight lab they are taking.

Tracking student success after program completion: Following program completion, completion surveys will be given to all students.

**Measuring Student Success**

Describe (below) the policies and procedures in place to measure individual student success in the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform the students as they progress through the program, and initiatives used to track student success after program completion.

**Student Success**

Description of measurements used and policies in place: Students must fulfill all FAA requirements in each ground school and flight lab with an 80% or better. In addition, students must receive passing scores in all other coursework, maintain a 2.5 GPA, and must pass all AVI courses with a C or better. The number of students attempting and passing the FAA written and practical (check ride) exams for each certification with comparison to the annual published pass rates.

Responsible person/group: The AVI flight assessments will be conducted by all check instructors at First Flight Aviation. The program data will be collected and stored by the Program Director for program assessment.

Frequency of data collection: Data will be collected on each student once they complete the ground school and flight labs each semester.

How results are used to inform students as they progress: Within each ground school course are required stage checks that meet the requirements of the training course outlines. Students who are successful will pass all stage checks and end of course exams.

Initiatives to track student success after program completion: completer surveys will be given to all students who complete the program.

**Are additional faculty needed to support this program?**  Yes  No

**If yes, provide a timeline for hiring.** Adjuncts will be hired based on course offerings.

**Provide the number of existing faculty members available to teach in the proposed degree/major below.**

**Full-time** 0

**Less than Full-time** 2

**Provide an estimate of the number of faculty members to be added during the first two years of program operation below.**

**Full-time** 0

**Less than Full-time** 12

**Acknowledgment of Completion**  I have reviewed this for publication in the catalog. The required forms are attached. If applicable, GPS changes will be addressed.



1. Validate and Launch

2. Save

3. To approve, select the Decisions tab  from the Proposal Toolbox (right side). Do not complete the section below.

**ADMINISTRATIVE USE ONLY - DO NOT COMPLETE**

**To be completed after Board of Trustees approval**

Attach signed Board of Trustees resolution.

<b>Resolution #</b>	<b>Date of Approval</b>
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**To be completed by the Provost**

Attach Directive signed by Chancellor.

<b>ODHE Directive #</b>	<b>Date of Approval</b>
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**To be completed by Financial Aid**

<b>Eligible for Title IV funding:</b> <input checked="" type="radio"/> Yes <input type="radio"/> No
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**To be completed on the CIP step**

<b>CIP</b> 490102	<b>CIPC Description</b> Airline/Commercial/Professional Pilot and Flight Crew
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**To be completed by Registrar**

<b>Approved Effective Term</b> <input type="radio"/> Fall <input type="radio"/> Spring <input type="radio"/> Summer	<b>Year</b>
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<b>Banner Program Name</b>	<b>Banner Program Code</b>
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<b>Banner Major Name</b>	<b>Banner Major Code</b>
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<b>Concentration Name(s) and Code(s) if applicable</b>
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<b>Degree Type</b>	<b>Program Type</b>
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<b>Special Program Indicator</b> <input type="radio"/> Special Admission Associate Degree Program (A) <input type="radio"/> Bachelor's Degree Completion Program (B) <input type="radio"/> Preparatory Coursework Undergraduate (U)
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<b>Status</b>
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