


# AABInternational

	<b>Purdue University</b>
	Purdue Polytechnic Institute, School of Aviation & Transportation Technology
	Bachelor of Science in Professional Flight Technology Bachelor of Science in Aviation Management
November 30, 2022	Student Achievement Data

For each AABI-accredited program, AABI Policy 3.4.2 requires institutions to accurately publish on the program's public website, a report of student achievement data including the following information, updated annually:

- The objectives of each accredited program
- Program assessment measures employed
- Graduation rates
- Rates and types of employment of graduates

Purdue University's School of Aviation and Transportation Technology has two AABI-accredited programs:

- Bachelor of Science in Professional Flight Technology
- Bachelor of Science in Aviation Management

This document presents mission statements, program objectives/competencies, assessment methods employed, graduation rates and rates and types of employment for each accredited degree program.

## **Mission Statements**

### **Purdue University Mission Statement**

Founded in 1869, Purdue University's mission is to share the land-grant ideal laid out under the 1862 Morrill Act by providing access to a liberal, practical education to the public. Purdue is a recognized member of the American Association of Universities (AAU), the Association of Public and Land-Grant Universities (APLU), and Universities Research Association (URA).

### **School Mission Statement**

The mission of the School of Aviation and Transportation Technology complements and strongly supports the mission of Purdue University in serving the citizens of the State of Indiana, the nation, and the world, through learning, discovery, and engagement activities. Specifically, the School's mission statement is as follows:

- *The mission of the School of Aviation and Transportation Technology is to prepare the next generation of leaders and change agents for the transportation sector.*

## **Program Educational Goals (PEGs) and Competencies**

### **Bachelor of Science in Professional Flight Technology**

Consistent with the mission of the School, the mission of the Professional Flight Technology program is as follows:

- *The mission of the Professional Flight program is to prepare the next generation of professional pilots and leaders in flight operations.*

The Professional Flight faculty and the Industry Advisory Board have identified six program-level competencies that map across the previously used program educational goals. The competency-based assessment provides the additional advantage of both rigorous as well as progressive assessment of students' attainment of requisite knowledge, abilities, and skills throughout their educational experience:

1. Leadership
2. Technical Excellence
3. Decision-Making
4. Communication
5. Teamwork
6. Resilience

Three levels of performance were identified for each competency: emerging (level 1), developing (level 2), and proficient (level 3). Instruments of direct measures and the corresponding assessment rubrics are being developed, implemented, and improved upon.

### **Bachelor of Science in Aviation Management**

Consistent with the mission of the School, the mission of the Aviation Management program is as follows:

- *The mission of the Aviation Management program is to prepare the next generation of airline and airport executives.*

The Aviation Management faculty and the Industry Advisory Board have identified six program-level competencies that map across the previously used program educational goals. The competency-based assessment provides the additional advantage of both rigorous as well as progressive assessment of students' attainment of requisite knowledge, abilities, and skills throughout their educational experience:

1. Leadership
2. Subject Matter Excellence
3. Ethics and Integrity
4. Communication
5. Teamwork
6. Individual Resilience and Innovation

Three levels of performance were identified for each competency: emerging (level 1), developing (level 2), and proficient (level 3). Instruments of direct measures and the corresponding assessment rubrics are being developed, implemented, and improved upon.

## **Program Assessment Measures Employed**

### **Bachelor of Science in Professional Flight Technology**

#### **Introduction**

In keeping with the competency-based approach, the program educational goal for the baccalaureate degree in Professional Flight Technology is as follows:

At least 80% of the graduates of the B.S. in Professional Flight Technology program at Purdue will demonstrate proficient-level competency in the following areas:

1. Leadership
2. Technical Excellence
3. Decision-Making
4. Communication
5. Teamwork
6. Resilience

#### **1. Leadership**

Graduates of the Professional Flight Program at Purdue University will integrate and display the cognitive, interpersonal, business, and strategic leadership skills that will enable them to seek new information and adapt their behavior and work methods in response to changing conditions; learn, adapt, and lead others in order to successfully navigate organizational changes; use critical thinking to analyze the weaknesses and strengths of different approaches to problem solving; will display a professional commitment to ethical practices, revise leadership processes, and adapt to facilitate achievement of professional goals in effective interpersonal and group interactions; and will utilize leadership abilities in harmony with their technical skills, level of authority, and responsibility.

The faculty and the Industry Advisory Board considered various aspects of leadership, particularly as they apply to the success of professional pilots. They identified the following sub-competencies and their corresponding levels of performance:

1. Demonstrates the knowledge, skills, and abilities to manage, lead, and empower others to efficiently address organizational and group needs and objectives
  - a. **Emerging**: Explains team members about issues requiring resolution and considers input; Identifies the need to distribute workload among others to ensure they meet key deliverables; Recognizes team members as resources for ideas and for achieving common goals.
  - b. **Developing**: Encourages others to share skills and abilities within work group to facilitate completion of challenging tasks; Seeks feedback from others and opportunities for self-learning and development, always learning from their experiences.
  - c. **Proficient**: Promotes cohesiveness of a team by defining roles and responsibilities of each team member and establishing individual and overall objectives; Holds self and other team members accountable for achieving results; Provides leadership, direction and constructive feedback on team and individual objectives.

2. Manages and resolves conflicts and disagreements in a constructive manner.
  - a. Emerging: Takes actions to address individual grievances; Ensures individuals receive mediation to resolve issues affecting the workgroup; Implements changes to ensure work environment is fair and equitable based on employee concerns.
  - b. Developing: Takes actions to address behavior issues to ensure individuals treat each other with respect; Recognizes conflict and takes steps to address issues by meeting with the involved parties.
  - c. Proficient: Resolves conflicts arising at any level due to competing objectives, limited resources, or differing perspective; Uses collaboration effectively as a style of managing contention; Confronts conflict positively and constructively to minimize impact to self, others, and the organization.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in leadership by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging- to developing- and finally to proficient-level of performance in leadership.

## 2. Technical Excellence

Graduates of the Professional Flight Program at Purdue University will attain flight certificates and ratings required for entry-level professional pilot positions; will have the ability to operate in the complex aviation system efficiently and safely; will demonstrate sound understanding of risk management, mitigation, and decision-making in normal, abnormal, and emergency situations; and they will complete advanced (or value added) flight and simulator training that will distinguish their technical excellence.

The faculty and the Industry Advisory Board considered various aspects of technical excellence, particularly as they apply to the success of professional pilots. They identified the following sub-competencies and their corresponding levels of performance:

1. Airmanship
  - a. Emerging: Demonstrates Airmen Certification Standards for the appropriate certificates and ratings.
  - b. Developing: Reflects upon strengths and weaknesses pertaining to the ACS. Identifies appropriate resources to address weakness and improve strengths. Creates goals towards the progression to transport category aircraft and or CFI and provides evidence towards achieving goals.
  - c. Proficient: Exhibits orientation toward teams and transitions from SRM to CRM. Operates safely and effectively in the national airspace system while integrating leadership, communication, teamwork, resilience, and decision-making.
2. Integration of certification standards with academic standards and competencies.
  - a. Emerging: With coaching, recalls and practices basic skills to self-evaluate performance, set goals, and monitors their own progress towards advancement in all competencies.

- b. Developing: With minimal coaching reflect upon one's professionalism, knowledge, skills, and abilities. Creates a critical self-evaluation and provides objective evidence towards improvement.
- c. Proficient: Exhibits life-long learning habits such as creating goals, utilizing resources and demonstrating the ability to conduct themselves in accordance to discipline professional standards.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in technical excellence by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging- to developing- and finally to proficient-level of performance in technical excellence.

### 3. Decision-Making

Graduates of the Professional Flight Program at Purdue University will demonstrate appropriate decision-making which will allow them to understand and solve complex problems, including those related to aviation safety, advanced technology, and a wide range of technical matters, as well as abstract concepts.

The faculty and the Industry Advisory Board considered various aspects of decision-making, particularly as they apply to the success of professional pilots. They identified the following sub-competencies and their corresponding levels of performance:

1. Applies appropriate decision-making process
  - a. Emerging: Reflects upon their current understanding of decision-making processes in different contexts. Recognizes when a decision-making process is needed. Selects appropriate decision-making process. Applies decision-making process to completion with coaching.
  - b. Developing: Can identify various decision-making processes within the discipline and for various contexts. Applies the proper decision-making process in for the appropriate context. Demonstrates the ability to gather accurate qualitative and quantitative data. Demonstrates the ability to interpret data with a critical view.
  - c. Proficient: Demonstrates an understanding of how their decision-making can impact outcomes. Can articulate their reasoning for making the decision and or argument and can analyze their own strengths and weaknesses through reflective exercises.
2. Demonstrates the ability to address complex issues
  - a. Emerging: With coaching can demonstrate the ability to follow a process and reflect on areas of improvement.
  - b. Developing: Applies decision-making processes without assistance and can critique others; Can combine decision-making processes and make judgements.
  - c. Proficient: Proactively demonstrates the ability to present arguments and perspectives as well as act upon appropriately based on factual information without coaching.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in decision-making by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging- to developing- and finally to proficient-level of performance in decision-making.

4. Communication

Graduates of the Professional Flight Program at Purdue University will select the proper modes of communication in various contexts; demonstrate the ability to gather information and deliver content utilizing all three communication modes; achieve the ability to critique their own work and that of others; and demonstrate effective oral, non-verbal and written communications, in normal and non-normal situations.

The faculty and the Industry Advisory Board considered various aspects of communication, particularly as they apply to the success of professional pilots. They identified the following sub-competencies and their corresponding levels of performance:

1. Students should be able to understand the different modes and contexts when communicating.
  - a. Emerging: Recalls and recognizes basic concepts and terms of context, audience, purpose, and to the assigned task(s) (e.g., expectation of instructor or self as audience).
  - b. Developing: Demonstrates adequate application of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).
  - c. Proficient: Demonstrates a thorough understanding on how to meet communicative needs for context, audience, and purpose.
2. Create messages appropriate to the context, audience, and purpose.
  - a. Emerging: With coaching, recalls and practices basic principles appropriate to a specific task(s) for basic organization, content, and presentation.
  - b. Developing: Consistently demonstrates effective use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.
  - c. Proficient: Without coaching, demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices.
3. Critically analyze messages.
  - a. Emerging: Remembers concepts with coaching intervention required, on sources and begins to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing. Is able to identify communication errors.
  - b. Developing: Consistently applies use of credible and relevant sources to support ideas that are situated within the discipline including writing. Is able to find errors

in their own work and others.

- c. Proficient: Demonstrates skillful use of high-quality, credible, relevant sources to evaluate ideas and or information that are appropriate for the discipline, including writing. Can create written documents with accurate citations. Can critique, analyze, and correct errors consistently and independently.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in communication by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging- to developing- and finally to proficient-level of performance in communication.

#### 5. Teamwork

Graduates of the Professional Flight Program at Purdue University will display a teamwork orientation; demonstrate the ability to communicate effectively with team members; adapt, adjust, and consider alternative perspectives while working towards group goals; demonstrate the ability to direct and coordinate group activities, motivate team members, seek and assess information that improves team performance, and solve problems and manage conflicts; value group activities and perceive them as opportunities to learn and grow, improve individual and group performance, and to provide creative and comprehensive solutions to complex sociotechnical system problems.

The faculty and the Industry Advisory Board considered various aspects of teamwork, particularly as they apply to the success of professional pilots. They identified the following sub-competencies and their corresponding levels of performance:

1. Demonstrates the knowledge, skills, and abilities to manage, lead, and empower others to efficiently address organizational and group needs and objectives.
  - a. Emerging: Explains team members about issues requiring resolution and considers input; Identifies the need to distribute workload among others to ensure they meet key deliverables; Recognizes team members as resources for ideas and for achieving common goals.
  - b. Developing: Encourages others to share skills and abilities within work group to facilitate completion of challenging tasks; Seeks feedback from others and opportunities for self-learning and development, always learning from their experiences.
  - c. Proficient: Promotes cohesiveness of a team by defining roles and responsibilities of each team member and establishing individual and overall objectives; Holds self and other team members accountable for achieving results; Provides leadership, direction and constructive feedback on team and individual objectives
2. Manages and resolves conflicts and disagreements in a constructive manner.
  - a. Emerging: Takes actions to address individual grievances; Ensures individuals receive mediation to resolve issues affecting the workgroup; Implements changes to ensure work environment is fair and equitable based on employee concerns.
  - b. Developing: Takes actions to address behavior issues to ensure individuals treat

each other with respect; Recognizes conflict and takes steps to address issues by meeting with the involved parties.

- c. Proficient: Resolves conflicts arising at any level due to competing objectives, limited resources, or differing perspective; Uses collaboration effectively as a style of managing contention; Confronts conflict positively and constructively to minimize impact to self, others, and the organization.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in teamwork by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging- to developing- and finally to proficient-level of performance in teamwork.

## 6. Resilience

Graduates of the Professional Flight Program at Purdue University will integrate and display the resilience skills that will enable them to adapt to changing circumstances; perceive failures and challenges as opportunities to learn and develop; apply their problem-solving abilities using an action-oriented approach; display a commitment to communicating and accepting fresh perspectives on a problem; and display the resilience competence that is in harmony with their technical skills, level of authority, and responsibility.

The faculty and the Industry Advisory Board considered various aspects of resilience, particularly as they apply to the success of professional pilots. They identified the following sub-competencies and their corresponding levels of performance:

1. Demonstrates the knowledge, skills, and abilities to focus and think clearly while under pressure.
  - a. Emerging: Is able to maintain composure and direction in high-pressure situations; Demonstrates flexibility when plans or situations change unexpectedly.
  - b. Developing: Remains determined despite frequent obstacles; Anticipates problems and proactively designs contingency plans; Perseveres on project despite changing objectives, deliverables, and deadlines.
  - c. Proficient: Creates new processes and systems to get around obstacles; Prioritizes work duties for maximum efficiency while under pressure; Demonstrates tenacity, persevering through significant challenges to reach goals.
2. Uses an action-oriented approach and objective approach to problem-solving.
  - a. Emerging: Demonstrates the ability to be adaptable and work successfully within a variety of changing situations and with various individuals or groups; Gathers information from multiple relevant sources and stakeholders when problem-solving. Is able to accept personal mistakes, admit to them, and learn from them.
  - b. Developing: Generates imaginative ideas to overcome obstacles; Is able to see solutions instead of just problems and to think more widely and creatively. Adjusts priorities quickly and effectively as situations change.
  - c. Proficient: Performs effectively when faced with time pressures, adversity,



disappointment, and/or opposition; Displays effective communication skills and the ability to seek out support in order to achieve positive outcomes; Reconciles conflicting and/or incomplete information to develop solution; Thinks clearly and makes rational and effective decisions under pressure. Is able to bounce back from failures and/or disappointments.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in resilience by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging- to developing- and finally to proficient-level of performance in resilience.

## **Bachelor of Science in Aviation Management**

### Introduction

In keeping with the competency-based approach, the program educational goal for the baccalaureate degree in aviation management is as follows:

At least 80% of the graduates of the B.S. in Aviation Management program at Purdue will demonstrate proficient-level competency in the following areas:

1. Leadership
2. Subject Matter Excellence
3. Ethics and Integrity
4. Communication
5. Teamwork
6. Individual Resilience and Innovation

#### 1. Leadership

Successful aviation management graduates demonstrate leadership in executive positions at airlines, airports, and a variety of other aviation and aerospace organizations, including government agencies such as the Transportation Security Administration and the National Transportation Safety Board. To ensure that future graduates have the leadership skills required for success in these executive roles, program faculty and industry representatives have identified leadership as a core competency.

The faculty and the Industry Advisory board considered various aspects of leaderships, particularly as they apply to success in the aviation industry. For example, leadership requires a combination of analytical and interpersonal skills, as well as the ability to identify the context for action, and adapt quickly to changing circumstances. Leadership can also be characterized by strategic thinking, planning, and flexibility, as well as the capability to envision success, communicate steps for success, and motivate the team to achieve success. Reflecting these important ideas, the leadership sub-level competencies in Aviation Management have been identified as follows:

1. Fostering actions towards achieving vision, mission, and goals of a project or activity;
2. Facilitating group processes; and
3. Utilizing situation, context, and cultural aspects of organizations effectively.

The three levels of performance for leadership are as follows:

1. Emerging: Identifies objectives and priorities; recognizes importance of tactical and strategic planning to accomplish identified goals.
2. Developing: Discovers approaches to leading individuals to accomplish identified goals.
3. Proficient: Formulates objectives and priorities and implements plans consistent with the long-term interests of the organization in a global environment. Capitalizes on opportunities and manages risks. Builds a shared vision with others and acts as a catalyst for organizational change. Influences others to translate vision into action.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in leadership by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging- to developing- and finally to proficient-level of performance in leadership.

## 2. Subject Matter Excellence

Management is essentially the allocation of resources, including human, financial and physical, with the objective of achieving an optimal return for all stakeholders. While management in the context of general business is already sufficiently complex, aviation management further complicates this task by introducing operational, safety and regulatory compliance elements into its domain. Being a safety-critical industry from the outset, the air transportation industry has employed comprehensive regulations, rules, and policies for decades to manage these compounding objectives and to achieve a safe and orderly growth of air traffic. Therefore, subject matter excellence in the context of aviation management suggests compliance throughout all hierarchies in the air transportation system.

The faculty and the Industry Advisory Board considered various aspects of subject matter excellence as it applies to the aviation industry. For example, the actual operational environment in air transportation is challenging since data is often incomplete and conflicting. The ability to identify patterns and indicating variables in the presence of noise is a valuable skill that foster advances within the industry. Similarly, critical thinking skills to support the ability to identify meaningful information from complex data are essential for all aviation management students. Reflecting these important ideas, the sub-level competencies under subject matter excellence in Aviation Management have been identified as follows:

1. Implementing and managing effective safety, health, and environment systems, using applicable laws, regulations, standards, and codes;
2. Effectively solving problems and making decisions;
3. Thinking critically; and
4. Possessing a satisfactory level of business acumen.

The three levels of performance for leadership are as follows:

1. Emerging: Recognizes problems and related data accuracy issues; identifies potential solutions.
2. Developing: Demonstrates understanding of technical subject matter and prepares problem solutions.
3. Proficient: Analyzes problems and evaluates the relevance and accuracy of information. Develops alternative solutions and chooses optimal solution. Justifies appropriate application of principles, procedures, regulations, requirements, and policies related to specialized expertise.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in subject matter excellence by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging to developing and finally to proficient level of performance in subject matter excellence.

3. Ethics and Integrity

Integrity and ethical behavior are the foundation of mutual trust and serve as a basis for producing graduates who have the capacity to serve as organizational leaders. Managers in various aviation organizations, including airlines, airports, non-governmental and governmental entities are relied upon to conduct themselves in an ethical manner to ensure the safe and efficient flow of people and commerce around the world. Ethics and integrity are necessary core competencies for any successful aviation manager, and the School has developed objectives to enable students in the program to better understand these issues and to act accordingly in their professional careers.

The faculty and the Industry Advisory Board considered various aspects of ethics and integrity as they apply to the aviation industry. For example, ethics refers broadly to the understanding of right and wrong, and behaving ethically requires an individual to act in a way consistent with what is perceived as right. The recognition of unethical behavior is also key. Integrity is the ability of an individual to do the right thing even when not being monitored. A combination of these two concepts is essential to fostering an environment that is conducive to the nurturing of ethical behavior. Reflecting these important ideas, the sub-level competencies under ethics and integrity in Aviation Management have been identified as follows:

1. Recognition of ethical issues;
2. Evaluation of different ethical perspectives, concepts, and risks;
3. Fostering of personal responsibility; and
4. Application of ethical perspectives, concepts, and maturity.

The three levels of performance for ethics and integrity are as follows:

1. Emerging: Identifies standards of ethical conduct
2. Developing: Illustrates ethics and integrity through examples
3. Proficient: Behaves in an honest, fair, and ethical manner, showing consistency in words and actions. Evaluates behavior against an ethical framework.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in ethics and integrity by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging to developing and finally to proficient level of performance in ethics and integrity.

4. Communication

The conveyance of critical information is imperative within the aviation industry, and has been well documented by the International Civil Aviation Organization. Such information must be communicated through multiple channels, including written, verbal, and graphical. Effective communication is founded on information literacy, which involves the ability to use appropriate information to learn and explore ideas, demonstrate understanding of a subject, and convey conclusions effectively. At the embedded outcome level, effective communication assumes basic fluency with such things as grammar, organization and structure. It also focuses on being able to convey ideas concisely in ways appropriate for the context, audience and purpose.

The faculty and the Industry Advisory Board considered various aspects of ethics and integrity as they apply to the aviation industry. For example, students graduating from the Aviation Management program are expected to be able to communicate orally, in writing, and through visual and graphical presentations in ways that are appropriate to their fields of study and future careers. At this level, students should recognize that communication occurs within and across communities, such as academic, public or professional, where ideas are formulated, debated, and weighed against one another. Overall, communication is considered a fundamental required competency impacting safety, airworthiness, and other critical operational outcomes in aviation, as well as a cornerstone for business and management. Reflecting these important ideas, communication in Aviation Management has been classified in three categories: writing communication, oral and interpersonal communication, and visual communication. Their sub-level competencies are as follows:

A. Written Communication

- 4.1A. Understanding the context of and purpose for writing, including considerations of the audience and the circumstances surrounding the writing tasks;
- 4.2A. Utilizing appropriate genre and disciplinary conventions; and
- 4.3A. Utilizing appropriate sources and evidence.

B. Oral and Interpersonal Communication

- 4.1B. Clear and consistently-observable organizational pattern;
- 4.2B. Thoughtful and effective choices of language; and
- 4.3B. Presenting a clear and consistent central message.

C. Visual Communication

- 4.1C. Clear and consistent organizational pattern;
- 4.2C. Effective use of graphics, and
- 4.3C. Presence of a clearly-communicated central message.

The three levels of performance for communication are as follows:

1. Emerging: Recalls and recognizes basic concepts and terms of context, audience, and purpose, and devotes minimal attention to the assigned task.
2. Developing: Demonstrates adequate application of context, audience, and purpose and a clear focus on the assigned task.
3. Proficient: Demonstrates a thorough understanding of how to meet communicative needs for context, audience, and purpose.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in communication by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging to developing and finally to proficient level of performance in communication.

#### 5. Teamwork

The aviation industry is global in nature and requires collaborative synergy from all stakeholders. The ability to work effectively as a team and facilitate teamwork is essential to aviation managers and, by extension, to management students, since successful teamwork can significantly enhance desired outcomes. It is imperative for future aviation leaders to obtain knowledge and achieve a thorough understanding of the merits of teamwork as preparation for managing a high-performance aviation organization.

The faculty and the Industry Advisory Board considered various aspects of teamwork as they apply to the aviation industry. For example, it is critical for aviation managers to facilitate their programs, strategies or initiatives through a collective and collaborative approach. Also, teamwork is particularly important in safety management because accidents can happen due to organizational risks such as insufficient management, supervision, cooperation, leadership, or lack of teamwork, when completing a mission. Reflecting these important ideas, the sub-level competencies under teamwork in Aviation Management have been identified as follows:

1. Facilitation of team member contributions and management of conflict;
2. Development and completion of tasks as an individual contributor; and
3. Development of skills to facilitate immersion with individuals from different cultures.

The three levels of performance for teamwork are as follows:

1. Emerging: Defines and identifies basic teamwork principles.
2. Developing: Demonstrates an understanding of expectation of team members.
3. Proficient: Inspires and fosters team commitment, spirit, pride, and trust. Facilitates cooperation among team members to accomplish group goals.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in teamwork by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging to developing and finally to proficient level of performance in teamwork.

#### 6. Individual Resilience and Innovation

Individual resilience is the ability to persevere in the face of adversity and changing circumstances, and innovation is the ability to creatively seek solutions and find opportunities in changing environment. Resilience and innovation are evolving concepts that encompass system identification, resilience objective setting, vulnerability analysis, and stakeholder engagement. Also, resilience is about building three types of capacities: adaptive capacity, absorptive capacity, and recoverability capacity.

The faculty and the Industry Advisory Board considered various aspects of resilience and innovation as they apply to the aviation industry. For example, successful aviation management graduates demonstrate resilience and innovation in executive positions at airlines, airports, and a variety of other aviation and aerospace organizations, including government agencies such as the FAA, TSA and NTSB. Reflecting these important ideas, the sub-level competencies under teamwork in Aviation Management have been identified as follows:

1. The ability to adapt and innovate; and
2. Willingness to engage, along with a belief that the task can be accomplished.

The three levels of performance for individual resilience and innovation are as follows:

1. Emerging: Describes the innovation process; identifies examples of resilience. Identifies problems that may be solved through innovation.
2. Developing: Discovers ways to apply ideas and existing technology to solve identified problems.
3. Proficient: Develops new insights, ideas, and innovations, questions conventional approaches, and implements innovative programs/processes. Deals effectively with pressure; remains optimistic and persistent, even under adversity. Recovers quickly from setbacks.

The program-level performance target is set as follows: At least 80% of the students will be able to demonstrate their competency in individual resilience and innovation by scoring 80% or better at proficient level. Multiple direct assessment tools are used to demonstrate progression of students from emerging to developing and finally to proficient level of performance in individual resilience and innovation.

## **Graduation Rates**

### **Number of Professional Flight Degrees Granted**

AY 2017-18	AY 2018-19	AY 2019-20	AY 2020-21	AY 2021-22
55	61	56	79	67

<b>Professional Flight Technology</b>	<b>Graduation Rate</b>		
	<b>4-Year</b>	<b>5-Year</b>	<b>6-Year</b>
<b>2013</b>	54.0%	74.0%	80.0%
<b>2014</b>	64.5%	79.0%	80.6%
<b>2015</b>	82.1%	87.5%	87.5%
<b>2016</b>	83.3%	90.9%	90.9
<b>2017</b>	84.4%	90.9%	
<b>2018</b>	79.0%		

AY 2017-18	AY 2018-19	AY 2019-20	AY 2020-21	AY 2021-22
34	41	40	36	44

<b>Aviation Management</b>	<b>Graduation Rate</b>		
	<b>4-Year</b>	<b>5-Year</b>	<b>6-Year</b>
<b>2013</b>	73.7%	84.2%	84.2%
<b>2014</b>	75.0%	85.0%	85.0%
<b>2015</b>	61.5%	61.5%	84.6%
<b>2016</b>	81.8%	81.8%	81.8%
<b>2017</b>	83.3%	91.7%	
<b>2018</b>	68.0%		

## **Employment/Graduation Plans**

### **Average Salary, Professional Flight**

2017 - \$34,555
2018 - \$48,942
2019 - \$47,659
2020 - \$47,667
2021 - \$51,441

### **Sample Places of Employment, Professional Flight**

flyGateway
Purdue Aviation, LLC
Tom Wood Aviation
Aspen Flight Academy
Bowling Green State University
Eastern Kentucky University
Frontier Airlines
Republic Airways
SkyWest Airlines

### **Plans After Graduation – 5 Year Trend, Professional Flight**

<b>Year</b>	<b>Employed</b>	<b>Continuing Education</b>	<b>Seeking Employment</b>	<b>Other</b>
<b>2017</b>	83.3%	16.7%	--	--
<b>2018</b>	69.7%	21.2%	--	9.1%
<b>2019</b>	63.0%	18.5%	--	18.5%
<b>2020</b>	71.4%	10.7%	7.14%	10.7%
<b>2021</b>	77.8%	2.8%	5.6%	13.9%



### **Average Salary (Aviation Management)**

2017 - \$46,000
2018 - \$36,133
2019 - \$48,839
2020 - \$62,500
2021 - \$ Not available

### **Places of Employment (Aviation Management)**

Fidelity Investments
First Wing Jet Center
Flexjet LLC
Mesa Airlines, Inc.
Republic Airways
Saint Joseph Airport Authority

### **Plans After Graduation – 5 Year Trend, Aviation Management**

<b>Year</b>	<b>Employed</b>	<b>Continuing Education</b>	<b>Seeking Employment</b>	<b>Other</b>
<b>2017</b>	86.7%	13.3%	--	--
<b>2018</b>	46.2%	30.1%	15.4%	7.7%
<b>2019</b>	79.0%	10.5%	10.5%	--
<b>2020</b>	46.2%	23.1%	15.4%	15.4%
<b>2021</b>	50.0%	16.7%	-	33.3%