

Student Achievement Data	
2023	
AAB International	
Compliance with AABI Policy 3.4.2	
Bachelor of Science in Aeronautics Concentration in Flight Science	
 SAINT LOUIS UNIVERSITY. — EST. 1818 —	Saint Louis University
November 30, 2023	School of Science and Engineering
	Oliver L. Parks Department of Aviation Science

Program Educational Objectives

The program educational objectives have been formulated and implemented to graduate professional pilots who meet the missions of the program, Parks College of Engineering, Aviation and Technology, and Saint Louis University. These objectives are focused on the development of graduates who have had exceptional academic experiences at a Jesuit Catholic university, and who are prepared to serve the local, national, and international community by advancing the quality of human life. The program educational objectives for the Bachelor of Science degree offered by the Department of Aviation Science are listed below. These objectives have been developed with input from the faculty, staff, as well as constituents, including students, alumni, and employers.

Program educational objectives are narrow, specific statements that describe what students are expected to know and to be able to do by the time of graduation from the degree program. This definition is consistent with Saint Louis University's assessment requirements. The program educational objectives for the bachelor's degree in Aeronautics are listed below.

Knowledge

Graduates of the Aeronautics degree program will be able to demonstrate their ability to build upon their fundamental knowledge in mathematics, sciences, and liberal arts to analyze, synthesize, and evaluate contemporary problems in the Aeronautics domain.

Skills

Graduates of the Aeronautics program will be able to demonstrate proficiency in the following skills:

- Aircraft piloting skills, if applicable to the student;
- Oral, written, and team communication skills to plan, execute, and present team projects in a peer-review setting;
- Research skills to collect data via appropriate literature searches, apply appropriate analytical techniques, synthesize professional-quality reports, and present the research results;
- Critical thinking and analytical skills to solve problems;
- Decision-making skills to evaluate and proactively resolve industry-related challenges, and;
- Team building skills that apply interpersonal communication skills and decision-making skills to resolve conflicts, manage challenges, and build high-performing teams.

Abilities

In general, graduates of the Aeronautics degree program will have the ability to succeed in life and be able to the following abilities:

- Learn to learn; therefore, they will be able to acquire new knowledge, solve new problems, and adapt to new environments;
- Maintain their curiosity for new knowledge, their imagination for innovative solutions, and their creativity in applying their knowledge and skills in novel ways;
- Develop their ability to self-motivate and dedicate themselves to every endeavor with passion;
- Apply sound ethical judgment in their personal and professional lives marked by integrity and trust, and;
- Strive to serve others in their personal, professional, and communal responsibilities.

Attitude

Ultimately, the graduates of the Aeronautics degree program are products of a Jesuit university. As such, they will demonstrate the following attitudes:

- Respect the universality—the inclusiveness—of a variety of intellectual disciplines that synergistically enrich each other as well as the multitude of spiritual paths that open one’s mind to the transcendent;
- Strive toward service to their fellow human beings as men and women for others, and in so doing, they will strive to apply their technical knowledge and skills for the betterment of humanity, and;
- Whole-heartedly charged to contribute toward their family, their society, and their organization. They will be inspired to choose to do what is most needed among the multitude of things that they are trained, skilled, prepared or gifted to do.

Mission Statement of the Department of Aviation Science

The mission of the Department of Aviation Science is to actively engage in the fulfillment of the University's mission so that our students are formed as global citizens who are intellectually, technically, and ethically prepared to be responsible leaders in their profession and their community.

The Aviation Science Department supports the mission of the University through its undergraduate programs by providing students with appropriate curricula and educational experiences. The curricula remain current by implementing a continuous assessment process which includes pertinent stakeholders such as employers, alumni, faculty and students.

Saint Louis University Statement on Assessment of Student Learning

A hallmark of Ignatian spirituality and pedagogy is the iterative cycle of critical self-examination, reflection and action.

To implement this cycle of assessment throughout the Division of Academic Affairs at Saint Louis University, faculty and staff strive to:

- Define what "quality" means to SLU, and for SLU, in the contexts of education, scholarship, service and operational support,
- Set measurable outcomes for educational, scholarship, service and operational performance across all programs and units,
- Develop and fully implement the curricular, co-curricular, academic support, scholarship, service and operational support programs designed to foster achievement of those outcomes,
- Regularly measure achievement of stated outcomes (by students, faculty and the institution collectively,)
- Regularly share and act upon achievement data to improve on all that we do, and
- Strengthen institutional conditions — cultures, infrastructures, human and fiscal resources and ethos — that intentionally support and advance all of the above.

SLU conducts assessment of student learning at both the University-wide and academic program levels for a variety of purposes. Accordingly, assessment results need to be understood and interpreted in their specific assessment contexts. That requires us to be intentional about how and for what purposes the results are reported and subsequently used by various University constituencies as described below:

- **For Faculty and Staff**
Results of the assessment of our graduates' performance are utilized by SLU faculty and staff to understand how and why students evidenced performance as they did; that research, in turn, should evidence what we, as an educational community, can do to improve that performance. *It should be noted that program- and University-level assessment results are expressly not used to "grade" students and they are not used in any way to determine if students should graduate or not.*
- **For Students and Families**
Knowing how many of SLU's graduates meet our own educational expectations can be helpful to students and families looking for an additional measure of the outcomes and benefits of a SLU education. Most helpful, however, may be knowing that SLU is very intentional about evaluating our educational quality and impact on students, and about acting upon what we learn to improve all that we do.

- **For the Higher Learning Commission**

Since 1916, Saint Louis University has been accredited by the [Higher Learning Commission](#) (HLC), formerly known as the North Central Association of Colleges and Schools. The HLC regularly monitors overall institutional quality and integrity and is focused on ensuring that SLU meets its educational objectives consonant with our University mission.

A key element of the HLC's oversight is monitoring and offering support for the improvement of our educational assessment efforts. SLU's transparent reporting of our assessment processes, results and — perhaps most important — *what we learn from our results to inform positive change*, are all critical to the HLC's understanding (and their assessment) of SLU's institutional performance.

Program Assessment Measures Employed

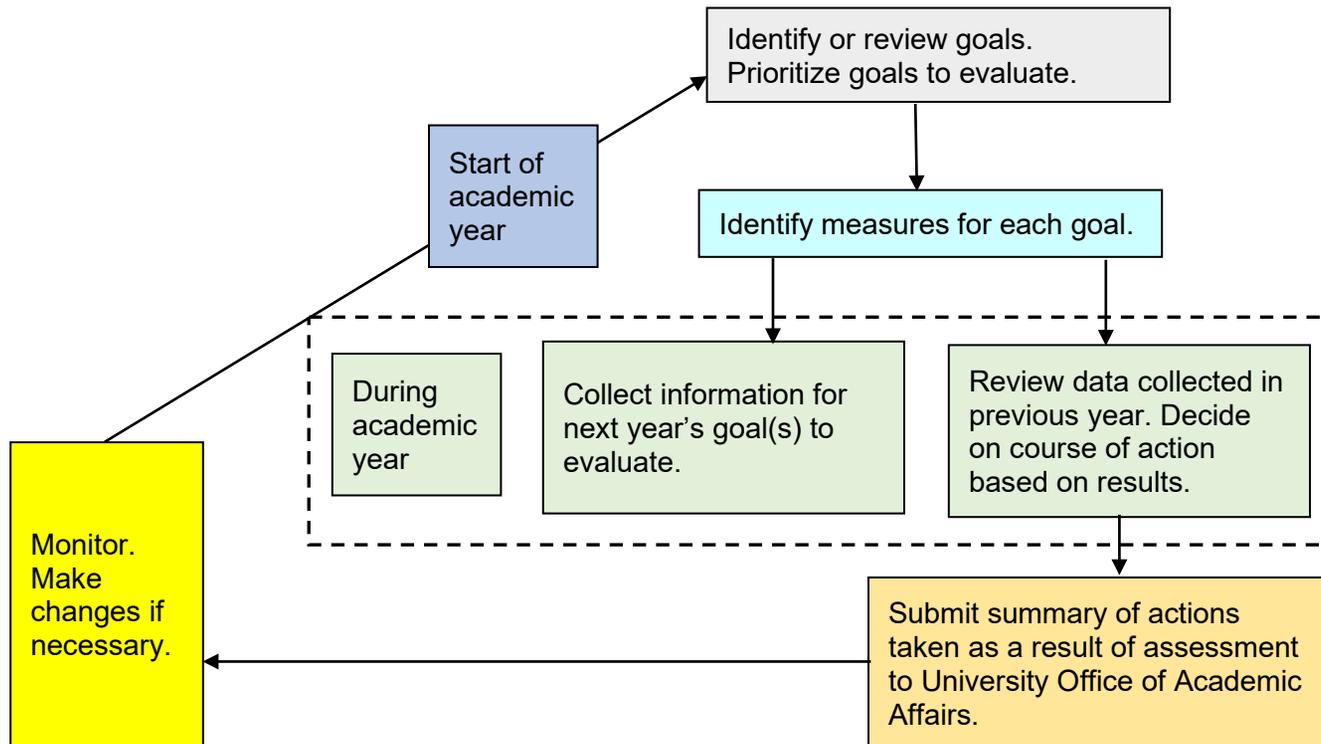
The assessment of program educational objectives is an ongoing process. Data is collected from our diverse group of stakeholders that share an interest in the academic degree programs. During the summer, a survey will be available to alumni detailing the adequacy of the program objectives. Demographic information within the dataset will include the graduation date and position related information. Department faculty meet at the conclusion of the fall and spring semesters to discuss the program educational objectives, and as necessary, make recommendations for changes in pedagogy, curriculum design, or the assessment plan itself.

A variety of assessment methods are employed to determine how well the program is achieving both the program educational objectives and the program outcomes. These include both direct and indirect measures and assessments.

- Graduation Exit Survey and Interviews
- Employer and Internship (or Practicum) Surveys
- Alumni Survey
- Federal Aviation Administration (FAA) Airman Knowledge Tests and Practical Exams
- Capstone Course Results
- Faculty Input
- Simulations
- Locally Developed Exams
- Student Volunteer or Organizational Activities
- Industry Advisory Board input.

More specific information, along with timelines can be found in the Department of Aviation Science's "[Program Assessment: Annual Report.](#)"

The measures collected are reviewed, recommendations for change are made and implemented, and the results of the changes are reviewed in subsequent cycles as shown in the following model.

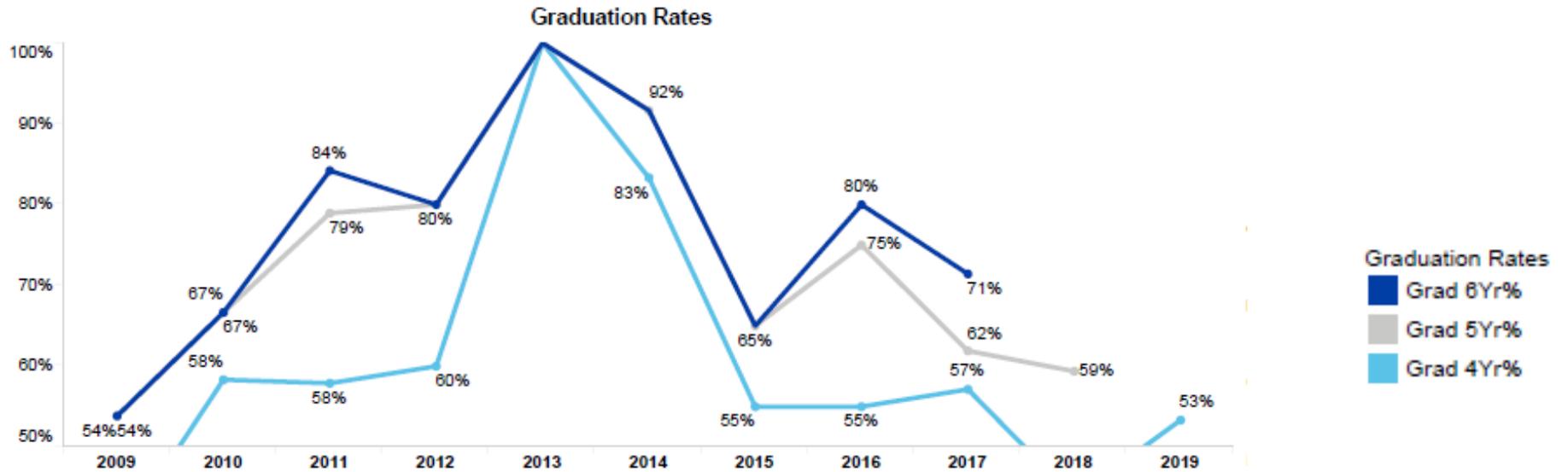


Freshman Retention and Graduation Rates – All Aeronautics



First to Second Year Retention Rates

Fall Cohort	Retention Cohort	Fall2 Return	Fall2 Return %
2009	13	9	69.2%
2010	12	8	66.7%
2011	19	16	84.2%
2012	15	13	86.7%
2013	8	8	100.0%
2014	12	12	100.0%
2015	20	19	95.0%
2016	20	16	80.0%
2017	21	18	85.7%
2018	32	30	93.8%
2019	45	38	84.4%
2020	35	35	100.0%
2021	41	36	87.8%



Graduation Rates

Fall Cohort	Grad Cohort	Grad 4Yr	Grad 4Yr%	Grad 5Yr	Grad 5Yr%	Grad 6Yr	Grad 6Yr%
2009	13	5	38.5%	7	53.8%	7	53.8%
2010	12	7	58.3%	8	66.7%	8	66.7%
2011	19	11	57.9%	15	78.9%	16	84.2%
2012	15	9	60.0%	12	80.0%	12	80.0%
2013	8	8	100.0%	8	100.0%	8	100.0%
2014	12	10	83.3%	11	91.7%	11	91.7%
2015	20	11	55.0%	13	65.0%	13	65.0%
2016	20	11	55.0%	15	75.0%	16	80.0%
2017	21	12	57.1%	13	61.9%	15	71.4%
2018	32	14	43.8%	19	59.4%		
2019	45	24	53.3%				

Rates and Types of Employment

**Rates of Employment
Bachelor of Science in Aeronautics
Concentration in Flight Science**

Graduation Year	Num. of Graduates Contacted	Num. of Graduates Responded	Num. of Employed	Num. of Unemployed Seeking	Num. of Unemployed Not Seeking	Military	Continuing Education	Success Rate
2022	15	2	1	0	0	0	1	100%
2021	11	1	1	0	0	0	0	100%
2020	17	4	2	0	0	0	2	100%
2019	21	12	10	1	0	0	1	100%
2018	21	7	6	1	0	0	0	85.7%

**Places and Types of Employment - Reported
Bachelor of Science in Aeronautics
Concentration in Flight Science**

2021 Graduates	
Place	Type
Saint Louis University	Certified Flight Instructor
Saint Louis University	Business Administration