

AVIATION, PH.D.

Saint Louis University's Ph.D. in aviation is offered in both online and on-campus formats. The online option is ideal for working professionals while being on campus provides greater opportunities for interdisciplinary coursework and research collaboration. On-campus students are also eligible to be considered for graduate assistantship positions.

Program Highlights

- Ph.D. students in aviation at SLU complete coursework before scheduling a qualifying exam that focuses on topics related to the coursework and assesses general preparation for graduate research.
- Upon successfully passing the qualifying exam, students develop a dissertation proposal under the supervision of a research mentor. Students then present and defend the dissertation proposal.
- After conducting research and writing a dissertation, students defend the dissertation in a public forum and then privately to a committee.

Curriculum Overview

Students will work with their advisor and Ph.D. committee to determine the specific coursework to complete the program. Those students holding an appropriate Master of Science degree may include a maximum of 27 credits of the associated M.S. degree course credits, but not the thesis or project credits, in the 63 credits required for the Ph.D. degree.

Careers

Graduates with a Ph.D. in aviation are uniquely qualified to conduct aviation-related research in academia, government and industry.

Admission Requirements

Begin your application for this program at www.slu.edu/apply (<http://www.slu.edu/apply.php>).

Most admitted students meet the following criteria:

- Undergraduate GPA of at least 3.0
- A four-year undergraduate degree in aviation or a field related to the desired graduate program

Application Requirements

- Online application form
- Official transcript(s) of all previous degrees
- Three letters of recommendation (preferably from recent instructors)
- A writing sample solely authored by the applicant that has been preferably composed within the last two to three years. The sample should relate to a contemporary issue in aviation or describe the student's proposed research agenda and how that contemporary issue or proposed research agenda matches the research currently being conducted by faculty in the Department of Aviation Science (<https://www.slu.edu/science-and-engineering/academics/parks-aviation-science/>). Submissions should be formatted in APA style, be between 3,500-4,500 words, and include an abstract of fewer than 300 words.
- Curriculum vitae/résumé
- Professional goal statement

Requirements for International Students

All admission policies and requirements for domestic students apply to international students along with the following:

- Demonstration of English Language Proficiency (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/english-language-proficiency/>)
- Proof of financial support, including:
 - A letter of financial support from the person(s) or sponsoring agency funding the time at Saint Louis University
 - A letter from the sponsor's bank verifying that the funds are available and will be so for the duration of study at the University
- Academic records, in English translation, of students who have undertaken postsecondary studies outside the United States must include the courses taken and/or lectures attended, practical laboratory work, the maximum and minimum grades attainable, the grades earned or the results of all end-of-term examinations, and any honors or degrees received. WES and ECE transcripts are accepted.

Application and Assistantship Deadlines

The department only reviews applications for the fall semester. To be considered for enrollment in the fall semester, submit application materials by March 31.

Admitted students who want to be considered for an assistantship must submit a separate application for assistantship consideration by March 1.

Review Process

Once the online application is complete, and all the materials are received, the application is reviewed by the Office of Graduate Education and Research before being sent to the Department of Aviation Science (<https://www.slu.edu/science-and-engineering/academics/parks-aviation-science/>) for a recommendation. The final decision is made by the associate dean of graduate education and research.

Admissions decisions are made based on the background and educational experience of students. Applications are reviewed when completed, and decisions are generally made within a few weeks.

Apply Now (<http://www.slu.edu/apply.php>)

Tuition

Tuition	Cost Per Credit
Graduate Tuition	\$1,450

Additional charges may apply. Other resources are listed below:

Information on Tuition and Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition/>)

Miscellaneous Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/fees/>)

Information on Summer Tuition (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer-current/>)

Financial Support

The School of Science and Engineering offers graduate fellowship awards and assistantships each year. Assistantships provide tuition, stipend and health insurance. There are also many opportunities for students to

receive funding through external research grants that are managed by individual faculty.

For more information, visit the Office of Student Financial Services (<https://slu.edu/financial-aid/>).

Learning Outcomes

1. Graduates will be able to assess relevant literature or scholarly contributions in the field(s) of study.
2. Graduates will be able to apply the major practices, theories or research methodologies in the field(s) of study.
3. Graduates will be able to apply knowledge from the field(s) of study to address problems in broader contexts.
4. Graduates will be able to articulate arguments or explanations to both a disciplinary or professional audience and to a general audience, in both oral and written forms.
5. Graduates will be able to evidence of scholarly and/or professional integrity in the field of study.

Requirements

The aviation Ph.D. program requires a total of 63 credits beyond a bachelor's degree. Students will work with an adviser and Ph.D. committee to determine the specific coursework to complete the Ph.D. in aviation. If students have an applicable master's degree, 27 credits of that program may count towards the 63 credits necessary, with department approval. No research or project credits will be counted towards the advanced standing for the Ph.D.

Code	Title	Credits
ASCI 5980	Graduate Independent Study in Aviation Science	3
<i>Aviation Foundation Requirement</i>		12
Students select 12 credits with the Aviation Foundation (Graduate) attribute (p. 2)		
<i>Research Methodology Requirement</i>		12
Students select 12 credits with the Aviation Research (Graduate) attribute (p. 2)		
<i>Secondary Discipline</i>		12
Students should choose 12 credits in a secondary discipline complementary to the knowledge of aviation, with department approval		
<i>Aviation Electives</i>		12
Students should choose 12 credits with the Aviation Elective (Graduate) attribute (p. 2)		
<i>Dissertation Research</i>		12
ASCI 6990	Dissertation Research	
Total Credits		63

Non-Course Requirement

All students must complete an exit survey with their department/program during their final semester.

Continuation Standards

Students must maintain a cumulative grade point average (GPA) of 3.00 in all graduate/professional courses.

Aviation Foundation Attributed Courses

Code	Title	Credits
ASCI 5030	Aviation Security Management	3
ASCI 5040	Human Factors in Aviation Safety	3
ASCI 5150	Aviation Incident and Accident Analysis	3
ASCI 5210	Aviation Organization Theory and Management	3
ASCI 5220	Aviation Safety Programs	3
ASCI 5230	Prof Ethics and Standards	3
ASCI 6010	Federal & International Regs	3
ASCI 6020	Flight Op's Business & Admin	3
ASCI 6030	Aviation and Public Policy	3
ASCI 6070	Aviation Training Methods	3

Aviation Research Attributed Courses

Code	Title	Credits
ASCI 5010	Introduction to Aviation Research Methods	3
ASCI 5020	Aviation Safety Data Analysis	3
ASCI 5460	Qualitative Data Analysis	3
ASCI 5470	Quantitative Data Analysis	3
AA 5221	Applied Analytics & Methods I	3
EDR 5100	Intro to Inferential Stats: Ed	3
EDR 6100	Intermediate Applied Statistics for Education	3
ORES 5100	Research Methods in Health & Medicine	3
PSY 6500	Applied Multivariable and Multivariate Statistics in Behavioral Science	3
SOC 5750	Qualitative Analysis, Grounded Theory Method	3
SOC 5800	Survey Design & Sampling	3

Aviation Elective Attributed Courses

Code	Title	Credits
ASCI 5010	Introduction to Aviation Research Methods	3
ASCI 5020	Aviation Safety Data Analysis	3
ASCI 5030	Aviation Security Management	3
ASCI 5040	Human Factors in Aviation Safety	3
ASCI 5150	Aviation Incident and Accident Analysis	3
ASCI 5210	Aviation Organization Theory and Management	3
ASCI 5220	Aviation Safety Programs	3
ASCI 5230	Prof Ethics and Standards	3
ASCI 5460	Qualitative Data Analysis	3
ASCI 5470	Quantitative Data Analysis	3
ASCI 5980	Graduate Independent Study in Aviation Science	1-3
ASCI 6010	Federal & International Regs	3
ASCI 6020	Flight Op's Business & Admin	3
ASCI 6030	Aviation and Public Policy	3
ASCI 6070	Aviation Training Methods	3
AA 5221	Applied Analytics & Methods I	3
BME 6000	Preparing Future Faculty	3

EDR 5100	Intro to Inferential Stats: Ed	3
EDR 6100	Intermediate Applied Statistics for Education	3
GIS 5040	Introduction to Remote Sensing	3
IB 6000	Global Business Environment	3
IB 6220	International E-Business	3
ORES 5100	Research Methods in Health & Medicine	3
PSY 6500	Applied Multivariable and Multivariate Statistics in Behavioral Science	3
SOC 5750	Qualitative Analysis, Grounded Theory Method	3
SOC 5800	Survey Design & Sampling	3

Roadmap

This roadmap is just one example of a semester-by-semester plan of study for this program. There are other plans students can and do take. The plan of study for each particular student is established in consultation with each student's academic advisor; *this roadmap does not replace academic advising appointments.*

Roadmap notes:

- This Roadmap assumes full-time enrollment unless otherwise noted.
- Courses/Milestones marked with an "!" are critical and must be completed in the semester listed in the Roadmap to ensure a timely graduation.
- Course availability and sequencing are subject to change.

Roadmap for Students with Advanced Standing

Course	Title	Credits
Year One		
Fall		
ASCI 5150	Aviation Incident and Accident Analysis	3
ASCI 5220	Aviation Safety Programs	3
Credits		6
Spring		
ASCI 5030	Aviation Security Management	3
ASCI 5470	Quantitative Data Analysis	3
Credits		6
Year Two		
Fall		
ASCI 5040	Human Factors in Aviation Safety	3
ASCI 5460	Qualitative Data Analysis	3
Credits		6
Spring		
ASCI 5020	Aviation Safety Data Analysis	3
ASCI 5980	Graduate Independent Study in Aviation Science *	3
Credits		6
Summer		
Ph.D. Qualifying Exam		
Credits		0

Year Three

Fall

ASCI 6990	Dissertation Research	3
Credits		3

Spring

ASCI 6990	Dissertation Research	3
Credits		3

Summer

Ph.D. Proposal Defense/Doc Oral Exam		
Credits		0

Year Four

Fall

ASCI 6990	Dissertation Research	3
Credits		3

Spring

ASCI 6990	Dissertation Research	3
Credits		3

Summer

Ph.D. Dissertation Defense		
Credits		0

Total Credits 36

* ASCI 5980 Graduate Reading must be taken in the last semester of coursework prior to taking the Ph.D. qualifying examination, which is a requirement of the program.

Roadmap for Students without Advanced Standing

Course	Title	Credits
Year One		
Fall		
ASCI 5010	Introduction to Aviation Research Methods	3
ASCI 5150	Aviation Incident and Accident Analysis	3
Credits		6
Spring		
ASCI 5020	Aviation Safety Data Analysis	3
ASCI 5470	Quantitative Data Analysis	3
Credits		6
Year Two		
Fall		
ASCI 5030	Aviation Security Management	3
ASCI 5040	Human Factors in Aviation Safety	3
Credits		6
Spring		
ASCI 5460	Qualitative Data Analysis	3
ASCI 5210	Aviation Organization Theory and Management	3
Credits		6
Year Three		
Fall		
ASCI 5230	Prof Ethics and Standards	3

BME 6000	Preparing Future Faculty	3
Credits		6
Spring		
ASCI 5220	Aviation Safety Programs	3
ASCI 6010	Federal & International Regs	3
Credits		6
Year Four		
Fall		
ASCI 6020	Flight Op's Business & Admin	3
IB 6000	Global Business Environment	3
Credits		6
Spring		
ASCI 6030	Aviation and Public Policy	3
ASCI 6070	Aviation Training Methods	3
Credits		6
Year Five		
Fall		
ASCI 5980	Graduate Independent Study in Aviation Science *	3
Ph.D. Qualifying Exam		
Credits		3
Spring		
ASCI 6990	Dissertation Research	3
Credits		3
Summer		
ASCI 6990	Dissertation Research	3
Credits		3
Year Six		
Fall		
ASCI 6990	Dissertation Research	3
Ph.D. Dissertation Proposal/Doc Oral Exam		
Credits		3
Spring		
ASCI 6990	Dissertation Research	3
Ph.D. Dissertation Defense		
Credits		3
Total Credits		63

* ASCI 5980 Graduate Reading must be taken in the last semester of coursework prior to taking the Ph.D. qualifying examination, which is a requirement of the program.

Contact Us

For more information about any School of Science and Engineering graduate program, email ssegrad-admissions@slu.edu.