

AVIATION, DOCTOR OF

Saint Louis University's Doctor of Aviation (Av.D.) program is a professional doctorate program, fully online, designed for the working professional to develop advanced aviation knowledge and research skills. The knowledge and research developed will be used practically through a real-world application to solve aviation and aerospace industry issues and problems.

As the aviation industry advances, it has become increasingly beneficial, and in some cases required, for industry professionals to have advanced degrees. SLU's School of Science and Engineering has been on the forefront of educating aviation professionals by being the first school to award a Ph.D. in aviation (<https://catalog.slu.edu/colleges-schools/science-engineering/aviation/aviation-phd/>) and by offering a Master of Science in Aviation (<https://catalog.slu.edu/colleges-schools/science-engineering/aviation/aviation-ms/>). See the Department of Aviation Science (<https://catalog.slu.edu/colleges-schools/science-engineering/aviation/>) for more information.

Curriculum Overview

SLU's Doctor of Aviation consists of 36 credits beyond a master's degree, which includes nine credits of project guidance and graduate reading, 18 credits of foundational coursework, and nine credits of research methodology coursework. Courses are taught completely online. Each student prepares a program of study that must be approved by their faculty advisor, the department chair and the associate dean for graduate education and research for the School of Science and Engineering.

This program is developed within the context of the student's background and career goals, allowing students to customize their graduate program to suit their professional goals. Students in the online Av.D. degree program will generally be full-time professionals in the aviation/aerospace industry, including the military, whose goals do not require the completion of independent, original research necessary for a Ph.D. Applicants must already have a master's degree in a closely related field to apply for this program.

Fieldwork and Research Opportunities

Research enables industry experts in many areas of aviation to make the industry less complex while increasing safety. It aids consultants and experts in predicting and preventing scenarios that cause airline accidents, interruptions in service, technical challenges, and even pilot shortages and fuel prices.

The Av.D. degree program is designed to allow the graduate to apply research to real-world applications in a variety of areas, such as:

- Airworthiness
- Aviation security
- Aviation safety management systems (SMS)
- Education and training
- Human factors in aeronautics
- Operations research
- Organizational development

Careers

Graduates with the Av.D. are uniquely qualified to conduct aviation-related research in academic, government and industry. Possible

career fields include flight training and education, aviation-related management and aviation safety. After graduating, alumni are qualified for management positions within the aviation industry.

Admission Requirements

- Online application form
- Previous master's degree
- 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 to the research currently being conducted by faculty in the Oliver L. Parks Department of Aviation Science (<https://catalog.slu.edu/colleges-schools/science-engineering/aviation/>). Submissions should be formatted to be APA document style compliant, be between 3,500-4,500 words in length, and include an abstract of less 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:

- Demonstrate English Language Proficiency (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/english-language-proficiency/>)
- Proof of financial support must include:
 - 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.

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

Upon completion of the program, all Doctor of Aviation graduates should/will be able to:

1. Have a comprehensive knowledge of research methods and be able to apply them to their area of inquiry.
2. Critique and synthesize literature or scholarly contributions in their area of inquiry.
3. Implement ethical principles, regulations and policies related to aviation/aerospace industrial practices.
4. Serve as leaders in the aviation/aerospace industry by applying theories, concepts, and knowledge or developing strategies to resolve issues in the aviation/aerospace industry.
5. Contribute to the existing body of knowledge in aviation/aerospace disciplines through research involving evidence-based industrial practices.

Requirements

The Doctor of Aviation requires a total of 36 credits beyond a master's degree. Students will work with an adviser and Av.D. committee to determine the specific coursework to complete the Av.D. in aviation.

Code	Title	Credits
ASCI 6960	Project Guidance	6
ASCI 5980	Graduate Independent Study in Aviation Science	3
<i>Aviation Foundation Requirement</i>		<i>18</i>
Students choose 18 credits with the Aviation Foundation (Graduate) attribute (p. 2)		
<i>Research Methodology Requirement</i>		<i>9</i>
Students choose 9 credits with the Aviation Research (Graduate) attribute (p. 2)		
Total Credits		36

Non-Course Requirements

- Students must pass a comprehensive written examination.
- Students must pass an oral examination/proposal defense.
- Students must pass a public presentation and defense of their project.

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.

Course	Title	Credits
Year One		
Fall		
Aviation Foundation courses		6
Credits		6
Spring		
Aviation Foundation courses		6
Credits		6
Year Two		
Fall		
Aviation Foundation course		3
Aviation Research course		3
Credits		6
Spring		
Aviation Foundation course		3
Aviation Research course		3
Credits		6
Year Three		
Fall		
Aviation Research course		3
ASCI 5980	Graduate Independent Study in Aviation Science	3
Credits		6
Spring		
ASCI 6960	Project Guidance	6
Credits		6
Total Credits		36

Contact Us

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