



UNCREWED AIRCRAFT SYSTEMS FLIGHT & OPERATIONS

2023-24 STUDY GUIDE

About this degree option

The uncrewed aircraft systems flight and operations degree option provides students research opportunities, cutting-edge technology and equipment, and an exclusive education. The uncrewed aircraft systems industry continues to break new ground, which is why we built one of the largest enclosed UAS flight facilities in the nation. Our UAS expertise has been recognized nationally - we were awarded the country's first approval to provide commercial flight training and were the nation's first university to offer beyond line of sight flight operations to students.

Why this degree option?

K-State Salina offers a variety of advantages, including:

- One of the first and still one of the few universities in the country to offer a bachelor's degree track in Uncrewed aircraft systems.
- A hands-on approach to learning, giving students the necessary skills to safely operate and manage a diverse fleet of uncrewed aircraft both proprietary and commercially available.
- Additional education in manned aviation, avionics, aircraft maintenance and engineering technology.
- Accomplished UAS faculty engaged in the analysis, experimentation and exploration of ongoing projects with federal agencies, private sponsors and internal university groups as part of the university Applied Aviation Research Center.

Careers

Career options for UAS flight and operations graduates include, but are not limited to:

- Uncrewed Aircraft Pilot
- Surveyor
- Uncrewed Aircraft Flight Instructor
- Agricultural Researcher
- Uncrewed Operations Analyst
- Aerial Film & Photographer
- Data Collection & Analysis Specialist

Accreditation

We take our reputation seriously. Accreditation validates the quality of an institution as a whole, offering evaluated measurements of everything from academic offerings, governance, administration, mission, finances and resources. Kansas State University has been continuously accredited by the Higher Learning Commission (HLC) since 1916.

k-state.edu/assessment/accreditation

Transfers

At K-State Salina, you can transfer up to 60 qualifying credit hours to help you get your next degree. If you've already earned an associate degree from one of our partner institutions, you may be eligible to apply previously earned credits when enrolling in a related bachelor's degree option. We work with students every day to make the most of transfer credits within K-State Salina programs to help make earning that next degree more achievable. Your hard work matters. We want to help you make the most of it.

AN AEROSPACE & TECHNOLOGY EDUCATION IS:



INNOVATIVE LEARNING:

Learning by doing, through hands-on projects, lab time and in-the-field training.



REAL-WORLD EXPERIENCE:

Exploring innovations in your field through research, practicum and internship opportunities.



INDUSTRY CONNECTIONS:

Building relationships with industry members and gaining insight into your future career.



STUDENT-FOCUSED:

Faculty are focused on your personalized experience, working alongside you in the lab and classroom.

Bachelor of Science

120 credit hours required

Required coursework

Core courses:

AVT 340	Human Factors in Aviation	3
AAM 472	Large Fixed Wing Operations Flight Lab	2
PPIL 111	Private Pilot	4
PPIL 113	Private Pilot Flight Lab	1
UAS 114	Remote Pilot Certification for UAS	2
UAS 280	Multi-Rotor Construction Lab	2
UAS 115	Professional UAS Multi-Rotor Flight Lab	1
UAS 270	Introduction to UAS	3
UAS 272	UAS Safety Fundamentals	3
UAS 274	Introduction to Processing Remotely Sensed Data	3
UAS 275	Small UAS Maintenance I	3
UAS 300	UAS Powerplant Fundamentals	3
UAS 312	UAS Flight Instructor Ground School	3
UAS 314	Multi-Rotor Instructor Flight Lab	1
UAS 357	Introduction to Fixed-Wing Flight Lab	2
UAS 367	Introduction to Automated Fixed-Wing	3
UAS 387	UAS Safety Applications	2
UAS 465	FW Construction Lab and Autopilot Integration	3
UAS 471	Advanced Fixed Wing Operations Flight Lab	3
UAS 480	UAS Senior Design Project I	1
UAS 481	UAS Senior Design Project II	2
	Total	49

Additional requirements:

AVT 100	Introduction to Aviation	3
AVT 450	Aviation Safety Management	3
BUS 315	Supervisory Management	3
CMST 103	Computing Principles	3
COMM 106	Public Speaking I	3
ECON 110	Principles of Macroeconomics	3
ENGL 100	Expository Writing I	3
ENGL 200	Expository Writing II	3
ENGL 302	Technical Writing	3
MATH 100	College Algebra	3
MATH 150	Plane Trigonometry	3
MATH 205	General Calculus & Linear Algebra	3
PHYS 113	General Physics I	4
PSYCH 110	General Psychology	3
STAT 325	Introduction to Statistics	3
	Total	49

Electives:

UAS 475	Data Acquisition & Post-Processing	3
	Aviation/Electronics/Computer Elective*	3
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	Aviation/Electronics/Computer Elective*	3
	Aviation/Electronics/Computer Elective*	3
	Humanities Elective	3
	Humanities Elective	3
	Natural Science with Lab Elective	4
	Total	22

*Marked electives must be upper-level courses, 300 or above.

For full course descriptions,
visit courses.k-state.edu