Unmanned Systems Major (49 credits)

Unmanned Systems Core Courses (21 credits):

- UMS 181 Flight Theory for Non-Aviation Majors — 3 credits *
- UMS 281 Introduction to Unmanned Systems — 3 credits
- UMS 382 Mechanics of Unmanned Systems — 3 credits
- UMS 385 Human Factors of Unmanned Systems — 3 credits
- UMS 483 Payloads and Sensors — 3 credits
- UMS 485 Communications and Data Links — 3 credits
- UMS 491 Advanced UAS Operations — 3 credits

Aviation Department Core Courses (28 credits):

- AVT 130 Introduction to Aviation Technology — 2 credits
- AVT 143 Introduction to Flight — 1 credit **
- AVT 223 Aviation Weather Services — 3 credits
- AVT 307 Airport Operations — 3 credits
- AVT 309 Aviation Security and Emergency Management — 3 credits
- AVT 323 Air Traffic Control Systems — 3 credits
- AVT 325 Crew Resource Management — 3 credits
- AVT 405 Aviation Law — 3 credits
- AVT 425 Aviation Safety Management Systems — 3 credits
- AVT 430 Aviation Career Planning — 1 credit
- AVT 471 Topics for Aviation Majors — 3 credits

* AVT 141 Private Pilot Theory (6 credits) will substitute for UMS 181 (3 credits).
** AVT 142 Private Pilot Flight 1 will substitute for AVT 143 Introduction to Flight.

Document Requirement:

- UMS483, UMS485, and UMS491 require compliance with the International Traffic in Arms Regulations (ITAR) imposed by the State Department of the United States. These courses are open to U.S. Citizens only. Proof of citizenship must be on file in the Aviation Department prior to taking these courses.

Note:

- All Unmanned Systems students must pass each UMS and AVT course, used in their program, with a C grade (2.0 points) or higher.
- UMS483, UMS485, and UMS491 require compliance with the International Traffic in Arms Regulations (ITAR) imposed by the State Department of the United States. These courses are open to US Citizens only. To complete either the Bachelor of Science or the minor in Unmanned Systems, the student must be a U.S. citizen.
- Students are strongly encouraged to pursue a Minor field of study, especially in areas where unmanned systems may play a large role in the future. By learning and understanding a field of expertise, students will be able to effectively apply the technology to a business area. Suggested minors include Aviation Technology, Criminology and Criminal Justice, Geographic Information Science, Computer Engineering Technology, Computer Science, Communication, and Business Administration. Other ISU minors are available as well as the opportunity to obtain a double major.