

Unmanned Aerial Systems (AUAS)

Purdue Polytechnic Institute

School of Aviation and Transportation Technology

Advising Worksheet

Disclaimer: The Purdue West Lafayette catalog is considered the source for academic and programmatic requirements for students entering programs during the corresponding Fall, Spring, and Summer semesters. The Advising Worksheet assists students in the development of an individualized 8-semester plan. Students are encouraged to use this worksheet and MyPurduePlan* (the online degree auditing tool) as they work with their academic advisor toward the completion of all their degree requirements.

Notification: Each student is ultimately responsible for knowing, monitoring, and completing all degree requirements.

An undergraduate degree in the Purdue Polytechnic Institute requires completion of the following degree requirements.

| University Degree Requirements | | |
|--|--|---|
| Minimum 2.0 Cumulative GPA | Minimum 120 Credits that fulfill degree requirements | 32 Residency Credits (30000-level and above) at a Purdue University Campus |
| University Core Curriculum ** | | |
| https://www.purdue.edu/provost/students/s-initiatives/curriculum/courses.html | | |
| <ul style="list-style-type: none"> • Human Cultures: Behavioral/Social Science • Human Cultures: Humanities • Information Literacy • Oral Communication | | <ul style="list-style-type: none"> • Quantitative Reasoning • Science • Science, Technology & Society Selective • Written Communication |
| Civics Literacy Proficiency | | |
| https://www.purdue.edu/provost/about/provostInitiatives/civics/ | | |
| Required Major Program Courses (see following pages) | | |
| Departmental specific requirement <ul style="list-style-type: none"> • Students must earn a "C" or better in all AT courses. • Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF. • 2.0 Graduation GPA required for Bachelor of Science degree. • A course can only satisfy one departmental/program major degree requirement within a unique plan of study. • A course may be used to satisfy two separate departmental/program major degree requirements • UAS Related Selectives - See Unmanned Aerial Systems Supplemental Information. | | |
| Pass/No Pass option | | |
| <ul style="list-style-type: none"> • A student may elect the Pass/Not-Pass (P/NP) grading option for courses without an AT prefix. A student may not elect this option for more than 20 percent of the total credit hours required for graduation. AT prefix courses may be taken for P/NP only under extenuating circumstances and in close coordination with advisors and faculty. Some AT prefix courses have been established as P/NP for all students and are therefore required to be taken in that manner. For further information regarding P/NP, students should refer to the Purdue Regulations, Grades and Grade Reports, Pass/Not-Pass Option & Scholastic Indexes. | | |
| Non-course/Non-credit Requirements | | |
| <ul style="list-style-type: none"> • Complete an Internship Requirement. * Complete a Globalization Requirement. | | |

* This audit is not your academic transcript and it is not official notification of completion of degree or certificate requirements.

** University Core Curriculum Outcomes may be met through completions of the Purdue Polytechnic Institute curriculum. Students should Consult with their academic advisors and MyPurdue Plan for course selections.



Polytechnic Institute

Aviation & Transportation Technology -Unmanned Aerial Systems (AUAS)

Name:

PUID:

Suggested Arrangement of Courses:

| Cr | Fall 1st Year | Notes | Cr | Spring 1st Year | Notes |
|-----------|--|-------|-----------|--|-------|
| 1 | AT 10000 Introduction to Aviation Technology | | 3 | AT 10200 Aviation Business | |
| 3 | AT 10600 Basic Aircraft Science | | 3 | AT 10300 Aerospace Vehicle Propulsion and Tracking Systems | |
| 3 | AT 10901 Introduction To Uncrewed Aircraft System Operations | | 3 | AT 11901 Uncrewed Aircraft Systems: Safety And Risk Management | |
| 3 | TECH 12000 Design Thinking in Technology | | 3 | MA 16010 Applied Calculus I | |
| 3 | MA 15800 Precalculus - Functions & Trig | | 3 | SCLA 10200 – Transformative Texts: Oral | |
| 3 | SCLA 10100 Transformative Texts: Written | | | | |
| 16 | | | 15 | | |

| Cr | Fall 2nd Year | Notes | Cr | Spring 2nd Year | Notes |
|-----------|--|-------|-----------|--|-------|
| 3 | AT 20200 Aerospace Vehicle Systems Design, Analysis and Operations | | 3 | AT 20300 Aviation Operations Management | |
| 3 | AT 20900 Autonomous Aircraft Technology And Maintenance I | | 3 | AT 21900 Autonomous Aircraft Technology And Maintenance II | |
| 3 | AT 26502 Aircraft Electrical Systems | | 3 | AT 33502 Avionics Systems | |
| 4 | PHYS 22000 GEN Physics | | 3 | STAT 30100 Elem Stat Meth | |
| 3 | Free Elective | | 3 | Cornerstone Level II Selective List | |
| 16 | | | 15 | | |

| Cr | Fall 3rd Year | Notes | Cr | Spring 3rd Year | Notes |
|-----------|--|-------|-----------|---|-------|
| 3 | AT 30901 Introduction to UAS Sensor Technology | | 3 | AT 31900 Uncrewed Aircraft Systems: Applications, Data, And Documentation | |
| 3 | UAS Related Selective | | 3 | UAS Related Selective | |
| 3 | UAS Related Selective | | 3 | UAS Related Selective | |
| 3 | Cornerstone Level III Selective List | | 3 | Behavioral/Social Science Selective List | |
| 3 | Free Elective | | 3 | Free Elective | |
| 15 | | | 15 | | |

| Cr | Fall 4th Year | Notes | Cr | Spring 4th Year | Notes |
|-----------|---|-------|-----------|---|-------|
| 3 | AT 40900 Advanced Air Mobility: Management And Operations | | 3 | AT 41901 Advanced Air Mobility Capstone | |
| 3 | UAS Related Selective | | 3 | UAS Related Selective | |
| 3 | Economics Selective | | 3 | Science Core Selective | |
| 3 | Cornerstone Level III Human Cultures, HC Selective List | | 3 | Free Elective | |
| 3 | Free Elective | | 1 | Free Elective | |
| 15 | | | 13 | | |

*Satisfies a University Core Requirement

Graduation Requirements:

Students must earn a "C" or better in all AT courses.

120 semester credits & 2.00 Graduation GPA required for Bachelor of Science degree.

Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF

Each student must have 32 credit hours of 300- or 400-level Purdue courses for graduation.

Cornerstone Certificate is required with this major.

The student is ultimately responsible for knowing and completing all degree requirements.

myPurduePlan is knowledge source for specific requirements and completion

Effective Fall 2024



Polytechnic Institute

Departmental/Program Major Courses (104 credits)

Required Major Courses (64 credits)

- _____ 1 AT 10000 Introduction to Aviation Technology
- _____ 3 AT 10200 Aviation Business
- _____ 3 AT 10300 Aerospace Vehicle Propulsion and Tracking Systems
- _____ 3 AT 10600 Basic Aircraft Science
- _____ 3 AT 10901 Introduction To Uncrewed Aircraft System Operations
- _____ 3 AT 11901 Uncrewed Aircraft Systems: Safety And Risk Management
- _____ 3 AT 20200 Aerospace Vehicle Systems Design, Analysis and Operations
- _____ 3 AT 20300 Aviation Operations Management
- _____ 3 AT 20900 Autonomous Aircraft Technology And Maintenance I
- _____ 3 AT 21900 Autonomous Aircraft Technology And Maintenance II
- _____ 3 AT 26502 Aircraft Electrical Systems
- _____ 3 AT 30901 Introduction to UAS Sensor Technology
- _____ 3 AT 31900 Uncrewed Aircraft Systems: Applications, Data, And Documentation
- _____ 3 AT 33502 Avionics Systems
- _____ 3 AT 40900 Advanced Air Mobility: Management And Operations
- _____ 3 AT 41901 Advanced Air Mobility Capstone
- _____ 18 UAS Related Selective

Other Departmental /Program Course Requirements (40 credits)

- _____ 4 PHYS 22000 GEN Physics (satisfies Science Selective for core)
- _____ 3 SCLA 10100 (satisfies Written Communication for core)
- _____ 3 SCLA 10200 (satisfies Oral Communication for core)
- _____ 3 TECH 12000 Design Thinking in Technology (satisfies Information Literacy Selective for core)
- _____ 3 MA 15800 Precalculus - Functions & Trig (satisfies Quantitative Reasoning Selective for core)
- _____ 3 MA 16010 Applied Calculus I (satisfies Quantitative Reasoning Selective for core)
- _____ 3 STAT 30100 Elem Stat Meth
- _____ 3 Behavioral/Social Science Selective List (satisfies UCC: Human Culture Behavioral/Social Science for core)
- _____ 3 Cornerstone Level II Selective List
- _____ 3 Cornerstone Level III Selective List
- _____ 3 Cornerstone Level III Human Cultures, HC Selective List (satisfies UCC: Human Cultures, Humanities for core)
- _____ 3 Science Core Selective (satisfies Science Selective for core)
- _____ 3 Economics Selective

Electives (16 credits)

- _____ 16 Free Elective

University Core Requirements

Cornerstone III *Human Cultures Humanities*

UCC Selective *Human Cultures Behavioral/Social Science*

TECH 12000 *Information Literacy*

PHYS 22000 *Science Selective*

UCC Selective *Science Selective*

TECH 12000 *Science, Technology & Society Selective*

SCLA 10100 *Written Communication*

SCLA 10200 *Oral Communication*

MA 16010 *Quantitative Reasoning*

**The student is ultimately responsible for knowing and completing all degree requirements.
myPurduePlan is knowledge source for specific requirements and completion**

Purdue policy states that a student may attempt a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.

Effective Fall 2024

Aviation Technology Supplemental Information

Behavioral/Social Science Foundational Selective--

The following courses are approved to meet the Globalization Requirement and satisfies Human Cultures: Behavioral/Social Science for core.

Globalization--Globalization is a requirement for graduation and is embedded within the plan of study using the Behavioral/Social Science Foundational Selective.

[AGR 20100 - Communicating Across Culture Credits: 3.00](#)

[ANTH 20300 - Biological Bases Of Human Social Behavior Credits: 3.00](#)

[ANTH 20500 - Human Cultural Diversity Credits: 3.00](#)

[ANTH 23000 - Gender Across Cultures Credits: 3.00](#)

[ANTH 37900 - Native American Cultures Credits: 3.00](#)

[COM 22400 - Communicating In The Global Workplace Credits: 3.00](#)

[HDFS 20100 - Introduction To Relationship And Family Science Credits: 3.00](#)

[HDFS 28000 - Diversity In Individual And Family Life Credits: 3.00](#)

[POL 13000 - Introduction To International Relations Credits: 3.00](#)

[POL 14100 - Governments Of The World Credits: 3.00](#)

[POL 22200 - Women, Politics, And Public Policy Credits: 3.00](#)

[POL 23100 - Introduction To United States Foreign Policy Credits: 3.00](#)

[POL 23500 - International Relations Among Rich And Poor Nations Credits: 3.00](#)

[POL 32600 - Black Political Participation In America Credits: 3.00](#)

[POL 32700 - Global Green Politics Credits: 3.00](#)

[POL 33500 - China And The Challenges Of Globalization Credits: 3.00](#)

[POL 36000 - Women And The Law Credits: 3.00](#)

[SOC 10000 - Introductory Sociology Credits: 3.00](#)

[SOC 22000 - Social Problems Credits: 3.00](#)

[SOC 35200 - Drugs, Culture, And Society Credits: 3.00](#)

[SOC 42900 - Sociology Of Protest Credits: 3.00](#)

[WGSS 28000 - Women's, Gender, And Sexuality Studies: An Introduction Credits: 3.00](#)

[WGSS 28200 - Introduction To LGBTQ Studies Credits: 3.00](#)

[WGSS 38000 - Comparative Studies In Gender And Culture Credits: 3.00](#)

Cornerstone Certificate-- Cornerstone Certificate is a requirement for graduation and is embedded within the plan of study. Exceptions are provided due to change of catalog term, re-entry students, readmit students, transfer students, change of major within Purdue, or other situations on a per case basis.

Cornerstone Level III: Human Cultures Humanities Selective--Satisfies Human Cultures, Humanities for core.

[CLCS 38500 - Science, Medicine And Magic In The Ancient West Credits: 3.00](#)

[ENGL 32200 - Word, Image, Media Credits: 3.00](#)

[ENGL 36700 - Mystery And Detective Fiction Credits: 3.00](#)

[ENGL 37300 - Science Fiction And Fantasy Credits: 3.00](#)

[HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century Credits: 3.00](#)

[HIST 31405 - Science, Technology, Engineering And Mathematics \(STEM\) And Gender Credits: 3.00](#)

[HIST 31505 - American Beauty Credits: 3.00](#)

[HIST 33805 - History Of Human Rights Credits: 3.00](#)

[HIST 35205 - Death, Disease And Medicine In Twentieth Century American History Credits: 3.00](#)

[HIST 36305 - The History Of Medicine And Public Health Credits: 3.00](#)

[HIST 38001 - History Of United States Agriculture Credits: 3.00](#)

[HIST 38200 - American Constitutional History Credits: 3.00](#)

[HIST 38300 - Recent American Constitutional History Credits: 3.00](#)

[HIST 38400 - History Of Aviation Credits: 3.00](#)

[HIST 38700 - History Of The Space Age Credits: 3.00](#)

[HIST 47005 - Women And Health In America Credits: 3.00](#)

[PHIL 41100 - Modern Ethical Theories Credits: 3.00](#)

[PHIL 42400 - Recent Ethical Theory Credits: 3.00](#)

Economics Selectives

[AGEC 21700 - Economics Credits: 3.00](#)

[CSR 34200 - Personal Finance Credits: 3.00](#)

[ECON 21000 - Principles Of Economics Credits: 3.00](#)

[ECON 25100 - Microeconomics Credits: 3.00](#)

[ECON 25200 - Macroeconomics Credits: 3.00](#)

UAS Selectives--UAS Related Selectives - Credit Hours: 18.00. Each student must have 32 credit hours of 300- or 400-level Purdue courses for graduation. It is highly recommended that you plan ahead using the selectives

below.

[AD 11900 - Color Photography Credits: 3.00](#)

[AFT 35100 - Leading People And Effective Communication I Credits: 3.00](#)

[AFT 36100 - Leading People And Effective Communication II Credits: 3.00](#)

[AT 14400 - Private Pilot Lectures Credits: 4.00](#)

[AT 20501 - Statics For Aerostructures Credits: 3.00](#)

[AT 20802 - Aircraft Materials Credits: 3.00](#)

[AT 22300 - Human Factors For Flight Crews Credits: 3.00](#)

[AT 24900 - Instrument Flight Lectures Credits: 3.00](#)

[AT 25200 - Aviation Projects Credits: 3.00](#)

[AT 25400 - Commercial Flight Lectures Credits: 3.00](#)

[AT 26200 - Basic Aircraft Powerplant Technology Credits: 4.00](#)

[AT 26700 - Fixed And Rotary Wing Assemblies Credits: 3.00](#)

[AT 27200 - Introduction To Composite Technology Credits: 3.00](#)

[AT 27800 - Nondestructive Testing For Aircraft Credits: 3.00](#)

[AT 28600 - National Airspace Systems Operations Credits: 3.00](#)

[AT 30702 - Advanced Aircraft Systems Credits: 3.00](#)

[AT 30802 - Aircraft Materials Processes Credits: 3.00](#)

[AT 32001 - Advanced Aviation Operations Credits: 3.00](#)

[AT 32501 - Advanced Aviation Meteorology Credits: 3.00 or](#)

[EAPS 32500 - Aviation Meteorology Credits: 3.00](#)

[AT 32700 - Advanced Transport Flight Operations Credits: 3.00](#)

[AT 33800 - Airline Management Credits: 3.00](#)

[AT 34001 - Aerospace Business Statistics Credits: 3.00](#)

[AT 35400 - Turbine Flight Operations Lecture Credits: 2.00](#)

[AT 35900 - Airport Management Credits: 3.00](#)

[AT 36201 - Aviation Operations Credits: 3.00](#)

[AT 36302 - Fundamentals Of Powerplant Systems Credits: 4.00](#)

[AT 37200 - Aircraft Maintenance Practices Credits: 3.00](#)

[AT 37600 - Aircraft Gas Turbine Engine Technology I Credits: 4.00](#)

[AT 38100 - Aviation Security Credits: 3.00](#)

[AT 38500 - Design Support Analysis Credits: 2.00](#)

[AT 38800 - Large Aircraft Systems Credits: 3.00](#)

[AT 41200 - Aviation Finance Credits: 3.00](#)

[AT 42101 - Managerial Economics In Aviation Credits: 3.00](#)

[AT 42201 - Aerospace Risk Management Credits: 3.00](#)

[AT 43800 - Airline Operations Credits: 3.00](#)

[AT 44502 - Aircraft Electronics Credits: 3.00](#)

[AT 45100 - Airport Operations Credits: 3.00](#)

[AT 45900 - Airport Manager Certification Credits: 3.00](#)

[AT 47200 - Advanced Composite Technology Credits: 3.00](#)

[AT 47500 - Aviation Law Credits: 3.00](#)

[AT 47600 - Aircraft Gas Turbine Engine Technology II Credits: 3.00](#)

[AT 48100 - Aviation Safety Problems Credits: 3.00](#)

[AT 49200 - Aircraft Airworthiness Assurance Credits: 3.00](#)

[FNR 35700 - Fundamental Remote Sensing Credits: 3.00](#)

[FLM 24100 - Foundations Of Cinema Production Credits: 3.00](#)

[MGMT 20000 - Introductory Accounting Credits: 3.00](#)

[MGMT 20100 - Management Accounting I Credits: 3.00](#)

[MGMT 30400 - Introduction To Financial Management Credits: 3.00](#)

Aviation Management

Aviation Management selectives may consist of any 30000, 40000, or 50000 level AT prefixed courses. In addition, AFT 35100 and AFT 36100 may be used as AM selectives.

Airport Management - Recommended courses for the Airport Management focus area are AT 35900, AT 45100, and AT 45900.

Airline Management - Recommended courses for the Airline Management focus area are AT 33800 and AT 43800.

Internship/Professional Experience

The School of Aviation and Transportation Technology (SATT) requires an internship or professional experience for all SATT majors. A minimum of 160 hours of work experience is required. This requirement may be satisfied through documented work experience at an approved employer or service agency.

Examples of such organizations include, but are not limited to, Purdue Aviation LLC, aviation or aerospace companies, government agencies, or non-aviation companies that are of specific career interest to the student. Students who need academic credit should discuss AT 43300 with an advisor and must register before starting the internship.

https://polytechnic.purdue.edu/sites/default/files/files/SATT%20Internship_Professional%20Experience%2012_7_23%20Fillable.pdf