

Departmental/Program Major Courses (116 credits)

Required Major Courses (59 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 20200 | Aerospace Vehicle Systems Design, Analysis and Operations |
| _____ | (3) | AT 20300 | Aviation Operations Management |
| _____ | (1) | AT 49600 | Applied Research Proposal |
| _____ | (3) | AT 49700 | Applied Research Project |
| _____ | (3) | AT 20802 | Aircraft Materials |
| _____ | (3) | AT 26502 | Aircraft Electrical Systems |
| _____ | (3) | AT 26700 | Fixed & Rotary Wing Assemblies |
| _____ | (3) | AT 27200 | Introduction to Composite Technology |
| _____ | (3) | AT 27800 | Nondestructive Testing for Aircraft |
| _____ | (3) | AT 30702 | Advanced Aircraft Systems |
| _____ | (3) | AT 30802 | Aircraft Materials Processes |
| _____ | (3) | AT 33502 | Avionics Systems |
| _____ | (3) | AT 37002 | Aircraft Powerplant Technology |
| _____ | (3) | AT 37600 | Aircraft Gas Turbine Engine Technology |
| _____ | (3) | AT 38500 | Design Support Analysis |
| _____ | (3) | AT 44502 | Aircraft Electronics |
| _____ | (3) | AT 47600 | Aircraft Gas Turbine Engine Technology II |
| _____ | (0) | Globalization | |

Other Departmental /Program Course Requirements (57 credits)

| | | |
|-------|------|--|
| _____ | (3) | Humanities Foundational Selective (<i>satisfies Human Cultures Humanities for core</i>) |
| _____ | (3) | Behavioral/Social Science Foundational Selective (<i>satisfies Human Culture Behavioral/Social Science for core</i>) |
| _____ | (3) | TECH 12000 (<i>satisfies Information Literacy Selective for core</i>) |
| _____ | (4) | PHYS 21800 (<i>satisfies Science Selective for core</i>) |
| _____ | (3) | Science Foundational Selective (<i>satisfies Science Selective for core</i>) |
| _____ | (3) | ENGL 10600 or ENGL 10800 (<i>satisfies Written Communication for core</i>) |
| _____ | (3) | COM 11400 (<i>satisfies Oral Communication for core</i>) |
| _____ | (3) | MA 15800 (<i>satisfies Quantitative Reasoning Selective for core</i>) |
| _____ | (3) | MA 22100 or MA 16010 (<i>satisfies Quantitative Reasoning Selective for core</i>) |
| _____ | (3) | Economics Selective |
| _____ | (3) | Advanced English Selective |
| _____ | (3) | Technical Communications Selective |
| _____ | (3) | STAT 30100 |
| _____ | (3) | AT 20501 |
| _____ | (2) | CGT 16300 |
| _____ | (12) | Any University-approved minor or departmentally-approved thematic area of study |

Electives (4 credits)

| | | | | | | | | | | | |
|-------|-----|-----------------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|
| _____ | (4) | Free Electives | _____ | () | _____ | _____ | () | _____ | _____ | () | _____ |
| _____ | () | _____ | _____ | () | _____ | _____ | () | _____ | _____ | () | _____ |

University Core Requirements

| | | | | | |
|--|--------------------------|----------------------|---|--------------------------|-------------------------------|
| Human Cultures Humanities | <input type="checkbox"/> | UCC Selective | Science, Technology & Society Selective | <input type="checkbox"/> | TECH 12000 |
| Human Cultures Behavioral/Social Science | <input type="checkbox"/> | UCC Selective | Written Communication | <input type="checkbox"/> | ENGL 10600 / 10800 |
| Information Literacy | <input type="checkbox"/> | TECH 12000 | Oral Communication | <input type="checkbox"/> | COM 11400 |
| Science Selective | <input type="checkbox"/> | PHYS 21800 | Quantitative Reasoning | <input type="checkbox"/> | MA 15800 |
| Science Selective | <input type="checkbox"/> | UCC Selective | Quantitative Reasoning | <input type="checkbox"/> | UCC Calculus Selective |

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.

Aeronautical Engineering Technology (201710)
Revised 03/2016 (effective Fall 2016)

| FIRST SEMESTER | Prerequisite | CR | SECOND SEMESTER | Prerequisite | CR |
|--|--------------|-----------|--|--------------|-----------|
| AT 10000 - Introduction to Aviation Technology | | 1 | AT 20802 – Aircraft Materials | AT 10600 | 3 |
| AT 10200 - Aviation Business | | 3 | CGT 16300 – Graphical Comm. & Spatial Anal. | | 2 |
| AT 10600 – Basic Aircraft Science | | 3 | COM 11400 - Fundamentals of Speech Communication | | 3 |
| TECH 12000 - Technology and the Individual | | 3 | Humanities Foundational Selective | | 3 |
| MA 15800 – Precalculus | | 3 | Calculus Selective | | 3 |
| English Composition Selective | | 3 | | | |
| Total | | 16 | Total | | 14 |

| THIRD SEMESTER | Prerequisite | CR | FOURTH SEMESTER | Prerequisite | CR |
|--|----------------------|-----------|--|---|-----------|
| AT 10300 - Aerospace Vehicle Propulsion and Tracking Systems | | 3 | AT 20501 – Statics for Aerostructures | AT 10100 or AT 10600, CGT 16300, (MA 22100 or MA 16010) | 3 |
| AT 20200 - Aerospace Vehicle Systems | AT 10600 or AT 14400 | 3 | AT 26502 – Aircraft Electrical Systems | AT 20200 | 3 |
| AT 20300 - Aviation Operations Management | AT 10200 | 3 | AT 27800 - Nondestructive Testing for Aircraft | | 3 |
| AT 26700 - Fixed And Rotary Wing Assemblies | AT 10100 or AT 10600 | 3 | PHYS 21800 – General Physics | | 4 |
| AT 27200 – Introduction to Composite Technology | CGT 16300 | 3 | Free Elective | | 2 |
| Total | | 15 | Total | | 15 |

| FIFTH SEMESTER | Prerequisite | CR | SIXTH SEMESTER | Prerequisite | CR |
|---|-----------------------------------|-----------|---|--|-----------|
| AT 30702 - Advanced Aircraft Systems | AT 20200 | 3 | AT 30802 - Aircraft Materials Processes | AT 20100 or AT 20501, (MA 22100 or MA 16010), PHYS 21800, AT 20802 | 3 |
| STAT 30100 - Elementary Statistical Methods | | 3 | AT 33502 - Avionics Systems | AT 20200 or AT 26502 | 3 |
| Thematic Area Selective (AT 36302 for A&P) | (AT 10300, AT 26502 for AT 36302) | 3 | AT 37600 - Aircraft Gas Turbine Engine Technology I | AT 10300 | 3 |
| Behavioral/Social Science Found. Selective | | 3 | AT 38500 – Design Support Analysis | STAT 30100 | 3 |
| Science Foundational Selective | | 3 | Advanced English Selective | | 3 |
| Total | | 15 | Total | | 15 |

| SEVENTH SEMESTER | Prerequisite | CR | EIGHTH SEMESTER | Prerequisite | CR |
|---|----------------------------------|-----------|--|-------------------------|-----------|
| AT 37002 - Advanced Aircraft Powerplants | AT 10300 | 3 | AT 49700 - Applied Research Project | AT 30802, AT 49600 | 3 |
| AT 44502 - Aircraft Electronics | AT 33502 | 3 | Thematic Area Selective (AT 37200 for A&P) | | 3 |
| AT 47600 - Aircraft Gas Turbine Engine Tech. II | AT 37600 | 3 | Thematic Area Selective (AT 40200 for A&P) | | 3 |
| AT 49600 - Applied Research Proposal | AT 20100 or AT 20501, STAT 30100 | 1 | Thematic Area Selective (AT 47200 for A&P) | (AT 27200 for AT 47200) | 3 |
| Economics Selective | | 3 | Technical Communication Selective | | 3 |
| Free Elective | | 2 | Globalization | | 0 |
| Total | | 15 | Total | | 15 |

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

AVIATION TECHNOLOGY CURRICULUM DETAILS

Fall 2016

English Composition Selectives

ENGL 10600
ENGL 10800

Advanced English Selectives

ENGL 42000
ENGL 42100

Technical Communication Selectives

COM 31500
COM 32000
COM 32400
COM 32500
COM 41500

Calculus Selectives

MA 16010
MA 16100
MA 16500
MA 22100
MA 22300

Economics Selectives

CSR 34200
ECON 21000
ECON 25100
ECON 25200

Science, Humanities, and Behavioral/Social Science Selectives per UCC listing

Thematic Area Selective Requirement (Can be fulfilled by **any** of the following):

- Any University-approved minor
- 6 credit hours of 20000- or higher-level courses AND 6 credit hours of 30000 or higher-level courses from any of the following departments: AT, AFT, EAS, ECON, ENTR, HTM, IT, MGMT, OLS, or POL
- 12 consecutive credit hours in a Foreign Language

Aviation Management:

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

Airframe & Powerplant Certificate

AENT students are highly encouraged to enroll in the following courses in order to receive the FAA A&P certificate. These courses can be utilized to meet the Thematic Area graduation requirements.

- AT 36302
- AT 37200
- AT 40200
- AT 47200

Seeking A&P certificate (Please indicate by initialing): Yes _____ No _____

Globalization Requirement

Due to the international nature of the aviation industry, all B.S. degree students must meet the department's globalization requirement through one of the following options:

- Complete any university-sponsored study abroad program lasting at least 7 days
- Complete an internship or approved international research project that involves at least 7 days of international travel
- Provide documentation of having lived/traveled outside the U.S. for at least 15 days after a student's 12th birthday.
- Complete or place out of the Level IV (12 credit hours) course in any 1 foreign language.

AT Leadership Requirement consists of one of the following options:

- Complete the capstone course in an AABI- or ABET-accredited program.
- Complete an approved internship experience.
- Complete an FAA-issued certification.