B.S. Aviation (College of Engineering)  2021-2022 Academic Year

Student Information

Name: ____________________  OSU Email: ____________________

Suggested Curriculum

This should be used as a guide only. Semester offerings are subject to change.

<table>
<thead>
<tr>
<th>Year</th>
<th>Autumn</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>__MATH 1151 (Calculus 1) ........................................ 5 hr</td>
<td>__MATH 1172 (Engineering Math A) ........................................ 5 hr</td>
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<tr>
<td></td>
<td>__ENGR 1100.02 (Engineering Survey) .................................. 1 hr</td>
<td>__ENGR 1182 (Fundamentals of ENGR 2) .................................. 2 hr</td>
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<td>__ENGR1181 (Fundamentals of ENGR 1) ................................... 2 hr</td>
<td>___PHYSICS 1250 (Physics 1) ............................................. 5 hr</td>
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<tr>
<td></td>
<td>__AVIATN 2100 (Private Pilot Fndmths) ................................... 5 hr</td>
<td>__AVIATN 2200 (Aviation Communication) ................................ 3 hr</td>
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<td></td>
<td>__AVIATN 2000 (Intro to Aviation) ....................................... 3 hr</td>
<td>___General Education ......................................................... 3 hr</td>
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<tr>
<td>2</td>
<td>___AVIATN 2300 (Performance and wx) ..................................... 3 hr</td>
<td>___AVIATN 3000 (Aviation Management) .................................. 3 hr</td>
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<td></td>
<td>__General Education .................................................................. 3 hr</td>
<td>___AVIATN Elective .................................................................. 3 hr</td>
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<td></td>
<td>__General Education .................................................................. 3 hr</td>
<td>___Technical Elective (CSE recommended) ................................ 3 hr</td>
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<tr>
<td></td>
<td>__Technical Elective (Physics 1251 recommended) ............................ 5 hr</td>
<td>___Technical Elective ................................................................ 3 hr</td>
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<td>___General Education .................................................................. 3 hr</td>
<td>___General Education ......................................................... 3 hr</td>
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<tr>
<td>3</td>
<td>___AVIATN 3200 (Aviation Regulations) ...................................... 3 hr</td>
<td>___AVIATN 3300 (AVN Safety &amp; Human Factors) .............................. 3 hr</td>
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<td>___AVIATN Elective ..................................................................... 3 hr</td>
<td>___AVIATN Elective .................................................................. 3 hr</td>
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<td>___Technical Elective .................................................................. 3 hr</td>
<td>___General Education ......................................................... 3 hr</td>
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<tr>
<td></td>
<td>___Technical Elective (CSE recommended) .................................... 3 hr</td>
<td>___Technical Elective (Statistics recommended) ............................ 3 hr</td>
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<td>___General Education .................................................................. 3 hr</td>
<td>___General Education ......................................................... 3 hr</td>
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<tr>
<td>4</td>
<td>___AVIATN Elective ..................................................................... 3 hr</td>
<td>___AVIATN 4500 (Aviation Capstone) ...................................... 3 hr</td>
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<td>___AVIATN Elective ..................................................................... 3 hr</td>
<td>___Technical Elective ................................................................ 2 hr</td>
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<td>___General Education .................................................................. 3 hr</td>
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Total Hours to complete the degree program = 124

Program Options

Courses printed in BOLD are required Aviation courses

*Students may apply to the PPC (Professional Pilot Certification) specialization after completing AVIATN 2100 if they wish to fly. Admittance to the PPC specialization is competitive and students must apply to the program.

Acceptance Criteria: Students begin the Aviation program as a pre-major. Acceptance into the Aviation major is dependent on the point-hour ratio upon completion of the following pre-major courses: AVN 2000, 2100; Math 1151, 1172 or 1152; Physics 1250; English 1110 and Engineering 1181, 1182. A minimum PHR of 2.0 is required. Students must be accepted into the major to take the 3000 level or above Aviation courses.
**Aviation and Technical Electives**

**AVIATION** – Choose at least 12 hours

- (3 hr) AVN 2900 (Fundamentals of Air Traffic Control)
- (3 hr) AVN 3193 (Individual Studies in AVN)
- (3 hr) AVN 3194 (Group Studies in Aviation)
- (3 hr) AVN 3400 (Air Accident Investigation)
- (3 hr) AVN 3600 (Business & Corporate Aviation)
- (3 hr) AVN 3700 (Building a Diverse Workforce in AVN)
- (3 hr) AVN 4000 (Air Transportation Analysis)
- (3 hr) AVN 4200 (Flight Dispatch Fundamentals)
- (3 hr) AVN 4201 (Applied Flight Dispatch)
- (3 hr) AVN 4400 (Airport Management)
- (3 hr) AVN 4800 (Professional Practices in Industry)
- (3 hr) AVN 5000 (Air Transportation Analysis II)
- (3 hr) AVN 5194 (Group Studies in Aviation)
- (3 hr) AVN 5300 (Airport Design and Development)

**TECHNICAL** - Choose at least 27 hours

- (4 hr) AAE 2200 (Intro to Aero Eng I)
- (4 hr) AAE 2201 (Intro to Aero Eng II)
- (5 hr) Physics 1251 (E&M, Optics, Modern Physics)
- (4-5 hr) Chemistry 1210 or 1250 (General Chemistry)
- (3-4 hr) Math 2173 or 2153 (Calculus 3)
- (3 hr) Math 2255 (Differential Equations)
- (2 hr) MECHENG 2010 (Statics)
- (3 hr) MECHENG 2030 (Dynamics)
- (3 hr) Statistics 2450 (Intro to Statistical Analysis I)
- (2 hr) ISE 2040 (Engineering Economics)
- (3 hr) CSE 1222 (Intro to C++)
- (3 hr) CSE 2111 (Spreadsheets and databases)
- (3 hr) CSE 2122 (Data in C++)

**General Education Requirement:**

**Writing and Communication**

- English 1110.xx 3 hr
- Second Writing Course 3 hr

**Social Science**

Must choose each course from a distinct subgroup of this category.

- 3 hr
- 3 hr

**Literature**

- 3 hr

**Visual and Performing Arts**

- 3 hr

**Historical Study**

- 3 hr

**Second Historical Study or Cultures and Ideas**

- 3 hr

**Social Diversity in the U.S. or Global Diversity**

Some courses may overlap with another GE category. See course list.

- 0 / 3 hr

**Ethics**

Some courses may overlap with another GE category. See course list.

- 0 / 3 hr

**Optional: Foreign Language**

**Foreign Language Minor Courses**: completion of a foreign language minor permits a student to overlap up to 6 credit hours between the Gen Ed and minor. A curricular petition must be submitted to the student’s program, which will forward it to the college for review. The courses must meet the spirit of the Gen Ed category for which overlap is requested.

**Optional: University Capstone**

Completion of a Social Science 3597 or 4597 can be substituted for a Social Science general education course in any subgroup. Completion of an Arts & Humanities 3597 or 4597 can be substituted for a Visual/Performing Arts general education course.

See the list of approved general education courses for additional details: [www.advising.engineering.osu.edu](http://www.advising.engineering.osu.edu).