### 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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MATH 1151 <em>(Calculus I)</em></td>
<td>MATH 1172 <em>(Engineering Math A)</em></td>
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<tr>
<td></td>
<td>ENGR 1100.02 <em>(Engineering Survey)</em></td>
<td>ENGR 1182 <em>(Fundamentals of ENGR 2)</em></td>
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<td></td>
<td>ENGR 1181 <em>(Fundamentals of ENGR 1)</em></td>
<td>PHYSICS 1250 <em>(Physics 1)</em></td>
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<tr>
<td></td>
<td>***AVIATN 2100 <em>(Private Pilot Fndmtls)</em></td>
<td>AVIATN 2200 <em>(AVN Org, Analysis &amp; Writing)</em></td>
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<tr>
<td></td>
<td>AVIATN 2000 <em>(Intro to Aviation)</em></td>
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<tr>
<td>2</td>
<td>AVIATN 2300 <em>(Performance and wx)</em></td>
<td>AVIATN 3000 <em>(Aviation Management)</em></td>
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<tr>
<td></td>
<td>AVIATN 2101 <em>(Private Pilot Flight Lab I)</em></td>
<td>AVIATN 2102 <em>(Private Pilot Flight Lab II)</em></td>
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<tr>
<td></td>
<td>General Education</td>
<td>Technical Elective</td>
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<td></td>
<td>General Education</td>
<td>General Education</td>
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<tr>
<td></td>
<td>Technical Elective <em>(Physics 1251 recommended)</em></td>
<td>Technical Elective <em>(Aero 2201 recommended)</em></td>
</tr>
<tr>
<td>3</td>
<td>AVIATN 2501 <em>(Comm Cross Country Flight)</em></td>
<td>AVIATN 3101 <em>(Instrument Flt Lab)</em></td>
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<td></td>
<td>AVIATN 3100 <em>(Instrument Flt Fundamentals)</em></td>
<td>AVIATN 4100 <em>(Comm Flt Fundamentals)</em></td>
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<td>AVIATN 3200 <em>(Aviation Regulations)</em></td>
<td>AVIATN 3300 <em>(AVN Safety &amp; Human Factors)</em></td>
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<td></td>
<td>Technical Elective <em>(Aero 2200 recommended)</em></td>
<td>Technical Elective <em>(Aero 2201 recommended)</em></td>
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<td>General Education</td>
<td>General Education</td>
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<tr>
<td>4</td>
<td>AVIATN 4101 <em>(Comm Flt Lab II)</em></td>
<td>AVIATN 4500 <em>(Aviation Capstone)</em></td>
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<tr>
<td></td>
<td>AVIATN 5100 <em>(Flight Instructor Methodology)</em></td>
<td>AVIATN 4300 <em>(Advanced Multi-Engine)</em></td>
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<td>Technical Elective</td>
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<td></td>
<td>General Education</td>
<td>General Education</td>
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</tbody>
</table>

**Total Hours to complete the degree program = 124**

### Program Options

Courses printed in **BOLD** are Aviation required courses to fulfill the Professional Pilot Certification Specialization and are offered in both autumn and spring semesters with the exception of AVIATN 4300, which is offered in spring only.

*Students may elect to earn their multi-engine rating instead of the CFI and will not be required to take AVIATN 5100 in this case.

**Professional pilot students may choose AVN 4301 OR 5101 but do not need both courses**

*** Students may apply to the PPC specialization after completing AVIATN 2100

Please see academic advising staff in Aviation for more information on various options within the Aviation program.

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**Acceptance Criteria:** 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. With the exception of flight related courses, students must be accepted into the major to take the 3000 level or above Aviation courses.

**Professional Pilot Specialization:** The Professional Pilot Certification is a competitive program with an application process. Admission to the specialization is not guaranteed.
### Technical and Other Electives

**AVIATION** – Students in the Professional Pilot Specialization may elect to take additional AVIATN courses to fulfill Restricted ATP hours. The following are RATP-eligible courses:

- (3 hr) AVN 2900 *(Fundamentals of Air Traffic Control)*
- (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 4000 *(Air Transportation Analysis)*
- (3 hr) AVN 4200 *(Flight Dispatch Fundamentals)*
- (3 hr) AVN 4201 *(Applied Flight Dispatch)*
- (2 hr) AVN 4301 *(Comm. Multi Engine Flt Lab)*
- (2 hr) AVN 5100 *(Flight Instructor Methodology)*
- (2 hr) AVN 5101 *(Flight Instructor ASEL Flt Lab)*
- (1 hr) AVN 5102 *(Flight Instructor AMEL Flt Lab)*
- (2 hr) AVN 5200 *(Instrmt Flight Instructor Mthds)*
- (1 hr) AVN 5201 *(Instrmt Flight Instructor Flt Lab)*

**TECHNICAL - Choose at least 27 hours**

- (4 hr) AAE 2200 *(Intro to Aero Eng 1)*
- (4 hr) AAE 2201 *(Intro to Aero Eng 2)*
- (5 hr) Physics 1251 *(E&M, Optics, Modern Physics)*
- (4 hr) Chemistry 1210 or 1220
- (3 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 1)*
- (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 1103 Course:** credit (including EM) for a foreign language sequence through 1103, or credit for a foreign language course with a prerequisite of 1103, can be used to satisfy the Cultures & Ideas Gen Ed category.

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Revised 9/16/2021