**SAN JOSE STATE UNIVERSITY**

**Bachelor of Science in Aviation**

***Flight Operations***

***FRESHMAN YEAR***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fall** | **Units** |  | **Spring** | **Units** |
| Avia 2, Introduction to Aviation | 3 |  | Phys 2A, Fundamentals of Physics | 4 |
| Comm 20 or 20N, Public Speaking (GE: A1) | 3 |  | Bus 20 or 20N, Financial Accounting | 3 |
| Avia 78, Introduction to Aviation Management | 3 |  | GE Area E | 3 |
| Math 71, Calc for Business & Aviation | 3 |  | AMS 1A, American Civilization | 6 |
| Engl 1A, Composition I (GE: A2) | 3 |  |  |  |
| **Total:** | **15** |  | **Total:** | **16** |
|  |  |  |  |  |

***SOPHMORE YEAR***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fall** | **Units** |  | **Spring** | **Units** |
| Avia 62, Instrument Flight Techniques | 3 |  | Avia 31, Aircraft Theory and Design | 3 |
| AMS 1B, American Civilization | 6 |  | Avia 43, Propulsion Theory | 3 |
| Avia 73, Air Traffic Control | 3 |  | Bus 90, Business Statistics | 3 |
| Phys 2B, Fundamentals of Physics | 4 |  | Chem 1A, General Chemistry | 5 |
| **Total:** | **16** |  | **Total:** | **14** |
|  |  |  |  |  |
| ***JUNIOR YEAR*** |
|  |  |  |  |  |
| **Fall** | **Units** |  | **Spring** | **Units** |
| Avia 42, Aircraft Systems | 3 |  | Avia 128, Aviation Safety and Security | 3 |
| Avia 68, Avionics & Airborne Comm. | 3 |  | Avia 173, Aviation Law | 3 |
| Avia 141, Human Factors in the Avia. Environ. | 3 |  | Avia 110, Aviation Meteorology | 3 |
| GE Area D1 | 3 |  | Engl 2, Critical Thinking & Writing (GE: A3) | 3 |
| Avia 177, General Aviation Ops. & Mgnt. | 3 |  | Technical Electives | 2 |
| **Total:** | **15** |  | **Total:** | **14** |
|  |  |  |  |  |
| ***SENIOR YEAR*** |
|  |  |  |  |  |
| **Fall** | **Units** |  | **Spring** | **Units** |
| Avia 91, Aircraft Turbine Engines | 3 |  | Avia 176, Airline Operations & Mgnt. | 3 |
| Avia 112, Professional Commercial Pilot | 3 |  | Avia 178, Airport Planning & Management | 3 |
| Avia 193, Aerodynamics | 3 |  | Avia 190, Senior Capstone Seminar | 3 |
| Avia 194, Pilot Avionics & Gen Avia Sys | 3 |  | Bus 186, Prof. & Business Ethics (GE: S) | 3 |
| Engr 100W, Engineering Reports | 3 |  | Tech 198, Technology & Civilization (GE: V) | 3 |
| **Total:** | **15** |  | **Total:** | **15** |

**Total units for degree : 120**

The Bachelor of Science in Aviation Program with option in Maintenance Management is designed to prepare graduates with in-depth knowledge and hands-on experience for careers such as Air Traffic Control Professional, Flight Planning Specialist, Flight Safety Professional, and Dispatch Professional.

**Aviation Program Required Course Prerequisites & Co- Req’s**

|  |  |
| --- | --- |
| **Course** | **Prerequisites** |
| Ams 1A, American Civilization | none |
| Ams 1B, American Civilization | none |
| Avia 2, Introduction to Aviation | none |
| Avia 3, Introduction to Private Pilot Part 141 Flight | Avia 2 |
| Avia 31, Aircraft Theory and Design | Phys 2A, Math 71, Avia 2 |
| Avia 42, Aircraft Systems | Phys 2A, Avia 2 |
| Avia 43, Propulsion Theory | Phys 2A, Avia 2 |
| Avia 62, Instrument Flight Techniques | Avia 2 |
| Avia 68, Avionics & Airborne Communications | Avia 42 |
| Avia 73, Air Traffic Control | Avia 2 |
| Avia 78, Intro to Avia Mgnt | none |
| Avia 91, Aircraft Turbine Engines | Avia 43 |
| Avia 110, Aviation Meteorology | none |
| Avia 112, Professional Commercial Pilot | Avia 2, Avia 31, Avia 42, Avia 43, Avia 62, Avia 91 |
| Avia 113, Commercial Prof. Pilot Part 141 Flight | FAA Private Pilot Certificate |
| Avia 128, Aviation Safety & Security | Avia 2 |
| Avia 173, Aviation Law | Avia 78 |
| Avia 176, Airline Operations & Management  | Avia 78, Bus 140 |
| Avia 177, General Aviation Operations & Mgnt. | Avia 78, Avia 2 |
| Avia 178, Airport Planning & Management | Avia 78 |
| Avia 179, Advanced Airport Planning & Management  | Avia 178 |
| Avia 190, Senior Capstone Seminar | Graduating Senior, Graduation Application Completed |
| Avia 193, Aerodynamics | Phys 2A, Math 71, Avia 31 |
| Avia 194, Introduction to Flight Engineering | Avia 42, Avia 43 |
| Avia 195, Internship with Avia Industry | Junior Standing and Instructor consent |
| Bus 20, Financial Accounting | Math 71 |
| Bus 90, Business Statistics  | Math 71 |
| Bus 140, Fund of Operations Management  | Upper Division Standing |
| Bus 141, Procurement and Supply Management  | Upper Division Standing |
| Bus 142, Total Quality Management | Upper Division Standing or instructor consent |
| Bus 144, Supply Chain Management  | Upper Division Standing or instructor consent |
| Bus 145, Global Operations Management | Upper Division Standing or instructor consent |
| Bus 150, Fund. Of Human Resource Management | Upper Division Standing or instructor consent |
| Bus 151, Labor Relations | Upper Division Standing or instructor consent |
| Bus 170, Fundamentals of Finance | Upper Division Standing or instructor consent |
| Bus 186, Professional and Business Ethics (GE: S) | Pass WST or ENGL/LLD 100A, UD Standing |
| Chem 1A, General Chemistry  | High school chemistry or Chem 10 or inst consent |
| Econ 1B, Principles of Economics: Micro | none |
| Engr 100W, Engineering Reports | Pass WST, Upper Division |
| Math 71, Calculus for Business and Aviation  | Math 8 or Math 19 |
| Phys 2A, Fundamentals of Physics | Algebra |
| Phys 2B, Fundamentals of Physics | Phys 2A |
| Tech 145, Lean Manufacturing | Bus 140 or 145 or ISE 140 |
| Tech 198, Technology and Civilization (GE: V) | Pass WST, Upper Division Standing |
| UrbP 136, Intro to Land Use & Facilities Plan | Upper Division Standing or instructor consent |