

Advising Road Map

Major Academic Planner/ 4-Year Roadmap

Major: B.S. Aviation

Option: Flight Operations

Total Units to Degree: 120

The following roadmap is an advising tool that outlines a path to complete requirements for graduation. This roadmap should be used in consultation with the catalog and the department advisor to identify additional requirements for completing the major (e.g., course grade minimums).

Fall Semester - Year 1	
Course	Units
Avia 001, Introduction to Aviation	3
Math 071 , Calc for Business & Aviation	3
AMS 1A, American Civilization	6
Engl 001A*, First Year Writing	3
Semester Total Units:	15

Spring Semester - Year 1	
Course	Units
GE Area E (to be picked with advisor)	3
Avia 073, Air Traffic Control	3
Phys 002A *, Fundamentals of Physics	4
AMS 1B, American Civilization	6
Semester Total:	16

Fall Semester - Year 2	
Course	Units
Avia 042, Aircraft Systems	3
Avia 078, Introduction to Aviation Management	3
GE Area A1* (to be picked with advisor)	3
Phys 002B *, Fundamentals of Physics	4
Avia 068, Avionics and Airborne Comms	3
Semester Total:	16

Spring Semester - Year 2	
Course	Units
Avia 031, Aircraft Theory and Design	3
Avia 043, Propulsion Theory	3
GE Third Area C (to be picked with advisor)	3
BUS 090 ***, Business Statistics	3
Engl 2 (or Engl 1B)* Critical Thinking & Writing	3
PASS THE WST Semester Total:	15

Fall Semester - Year 3	
Course	Units
Avia 091, Aircraft Turbine Engines	3
Avia 062 or Approved Elective	3
Bus 020 or 020N, Financial Accounting	3
Chem 001A **, General Chemistry	5
Approved Elective	2
Semester Total:	16

Spring Semester - Year 3	
Course	Units
Avia 128, Aviation Safety and Security	3
Avia 173, Aviation Law	3
Engr 100W**, Engineering Reporting	3
Avia 110, Aviation Weather	3
Avia 112 or Approved Elective	3
File for graduation Semester Total:	15

Fall Semester - Year 4	
Course	Units
Avia 177 or Avia 195, GA Ops and Management	3
Avia 141, Human Factors in the Avia. Envirmt.	3
Bus 186***, Professional and Business Ethics	3
Avia 178, Airport Planning and Management	3
Avia 193, Aerodynamics	3
Semester Total:	15

Spring Semester - Year 4	
Course	Units
Avia 176, Airline Operations and Management	3
Avia 198 **, Technology and Civilization	3
Avia 190, Senior Capstone Seminar	3
Avia 194, Pilot Avionics and GA Systems	3

Semester Total:	12

NOTES

*course meets a core GE requirement (student must complete Reflection on College Writing for Engl 1A)

**course meets a SJSU Studies (UDGE) requirement

*** **Minor in Business:** Students can elect BUS 140 and BUS 142 to obtain a business minor - exceeds 120 units see advisor

Course List and Pre-requisites

The Bachelor of Science in Aviation Program with option in Flight Operations is designed to prepare graduates with in-depth knowledge and hands-on experience for careers in flight and airspace optimization, flight safety processes, training and resourcing, traffic control and dispatch.

Course	Pre-requisites and Co-requisites
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, Co-req: Phys 2B
Avia 42, Aircraft Systems	Phys 2A, Avia 2, Co-req: Phys 2B
Avia 43, Propulsion Theory	Phys 2A, Avia 2, Co-req: Phys 2B
Avia 62, Instrument Flight Techniques	Avia 2
Avia 63, Instrument Rating Part 141 Flight	Avia 03, Avia 73
Avia 68, Avionics & Airborne Communications	Co-req: 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 31, Avia 42, Avia 62, Avia 91
Avia 113, Commercial Prof. Pilot Part 141 Flight	FAA Private Pilot Certificate, Co-req: Avia 112
Avia 128, Aviation Safety & Security	Avia 2
Avia 141, Human Factors in the Aviation Environment	none
Avia 173, Aviation Law	Avia 78
Avia 176, Airline Operations & Management	Avia 78
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, Pilot Avionics and General Aviation Systems	Avia 42, Avia 43
Avia 195, Internship with Avia Industry	Junior Standing and Instructor consent
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 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

