Aviation Flight Minor

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Students completing this minor will develop the aeronautical knowledge, experience, and proficiency required to obtain a private pilot certificate. This minor is intended for students that wish to incorporate practical airmanship experience into their academic background. To be eligible for certifications exams or licensure in the field, additional requirements must be fulfilled, including a medical exam administered by an FAA Aviation Medical Examiner. Additional fees associated with flight training apply. Interested students should contact the aviation department for more information.

About Academic Minors

Farmingdale State College students are invited to enhance their studies with an "Academic Minor." A minor is a cluster of thematically related courses drawn from one or more departments. In addition to department based minors (e.g. computer programming & info systems), interdisciplinary minors are also available (e.g. legal studies).

Academic minors are approved by the College-Wide Curriculum Committee and the Provost. Students must make application for an academic minor through the department offering the minor in conjunction with the Registrar's Office. Specific course work must be determined in consultation with a faculty member in the department offering the minor. A statement of successful completion of the academic minor will appear on the student's transcript at the time of graduation.

- A minor is considered to be an optional supplement to a student's major program of study.
- Completion of a minor is not a graduation requirement and is subject to the availability of the courses selected. However, if the requirements for a minor are not completed prior to certification of graduation in the major, it will be assumed that the minor has been dropped. Consequently, the student will only be certified for graduation in their primary major.
- Only students in 4 year baccalaureate programs can apply for a minor.
- A minor should consist of 15 to 21 credits, with the exception of the Chemistry and Air Force ROTC minors which require 22 credits.
- At least 12 credits must be in courses at the 200 level or higher.
- At least 9 credits must be residency credits.
- Specific requirements for each minor are determined by the department granting the minor.
- Students must maintain a minimum cumulative GPA of at least 2.0 in their minor. Some minors may require a higher GPA.
- Students are prohibited from declaring a minor in the same discipline as their major (e.g. one cannot combine an applied math minor with an applied math major).

**Academic minors may not apply to all curricula.**
- Students are permitted to double-count courses.
- Students are only permitted to take more than one minor with appropriate written approval of their department chair or curriculum dean.
Fall 2018: Subject to Revision

Required:

AVN 104 Private Pilot Ground 3
AVN 105 Private Pilot – Flight to Solo 1
AVN 106 Private Pilot – Flight to Certificate 1
AVN 201 Safety Ethics 3
AVN 202 Aviation Meteorology 3
AVN 321 Physiology of Flight 3
Aviation Elective (200 level or above) 3

Course Descriptions

AVN 104 Private Pilot Ground
Private Pilot-Ground Training will enable the student to meet the prerequisite(s) specified in 14 CFR Part 61.105 as well as 14 CFR Part 141 Appendix B, as appropriate. Selected subject areas will include airplane systems, aerodynamic principles, flight environment, communication and flight information, meteorology for pilots, FAA Regulations, National Airspace System, NTSB, ACs, interpretation of weather data, aircraft performance, radio and visual navigation, human factors, flight safety, and cross country flight planning. A grade will be issued upon taking the FAA Knowledge Examination? necessary for the Private Pilot certificate. Prerequisite(s): FAA Student Pilot Certificate Credits: 3

AVN 105 Private Pilot – Flight to Solo
Private Pilot Flight to Solo will enable the student to meet some of the prerequisite(s) specified in 14 CFR Part 61.109 or 14 CFR Part 141 Appendix B, as appropriate. During this course, the student obtains the foundations for all future aviation training. The student becomes familiar with the training airplane and learns how the airplane controls are used to establish and maintain specific flight attitudes and ground tracks. At the conclusion of the course, the student demonstrates proficiency in basic flight maneuvers and the student pilot will have successfully completed no less than three (3) takeoffs and full stop landings in the traffic pattern as Pilot-in-Command. Students must have a FAA Student Pilot Certificate/FAA 3rd Class or higher Medical Certificate. Aero fees will be charged. Note: FAA minimum hours approved are 35 total hours for AVN 105 & 106. Prerequisite(s): FAA Student Pilot Certificate and AVN 104 Credits: 1

AVN 106 Private Pilot – Flight to Certificate
Private Pilot Flight training will enable the student to meet the prerequisite(s) specified in 14 CFR Part 61.109 or 14 CFR Part 141 Appendix B, as appropriate. Private Pilot Flight to Certificate will enable the student to meet the requirements necessary to obtain a Private Pilot certificate. An enrolled student must demonstrate through oral examinations, practical tests, and appropriate records that he/she meets the knowledge, skill and experience requirements necessary to obtain a Private Pilot certificate with an airplane single-engine land rating. Selected subject areas will include engine starting, normal and crosswind taxiing, radio communications, normal takeoffs, power on and power off stalls, maneuvering during slow flight, traffic patterns, go around from a rejected landing, crosswind and normal landings, cross country flying, radio navigation, cockpit management, low level wind shear precautions, airport and runway marking and lighting, constant airspeed climbs and descents, stall spin awareness, and steep turns. Students must have a FAA Student Pilot Certificate/FAA 3rd Class or higher Medical Certificate. A grade will be issued upon taking the FAA Private Pilot practical exam. Aero fees will be charged. Note: FAA minimum hours approved are 35 total hours for AVN 105 & 106. Prerequisite(s): AVN 104 and AVN 105 with a grade of C or higher; FAA Student Pilot Certificate Credits: 1
AVN 201 Safety Ethics
This course emphasizes ethical decision making as it applies to Complex Systems, aviation and aerospace, nuclear power plant, civil and IT engineering and the medical field. These systems have an extremely narrow tolerance for error, often resulting in monumental impact on the public, the economy of the nation and human life. This course seeks to increase the awareness levels of ethical issue for industry professionals and to provide the necessary skills to effectively deal with such critical problem solving issues. Topics include complex systems ethical decision making, safety with human factors emphasis, applied ethics for members of complex systems, corporate culture and risk management theory, moral and values. Students cannot get credit for AVN 201 and 201W; AVN 201W can be used to fulfill the writing intensive requirement. Prerequisite(s): EGL 102 with a grade of C or higher Credits: 3

AVN 202 Aviation Meteorology
A basic course in Aviation Weather. Weather theory including differential heating, air mass development, wind frontal activity and systems, weather hazards, weather reporting and weather forecasting is covered. Charts which are studied include Surface Analysis and Weather Depiction Charts, Constant Pressure Charts, Composite Moisture Stability Charts. Prerequisite(s): AVN 104 with a grade of C or higher Credits: 3

AVN 321 Physiology of Flight
Operational and lifestyle considerations and consequences arising from physiological factors will be introduced, with an emphasis on the atmosphere and high-altitude flight (Hyperbarism). General fundamentals of anatomy and psychology will be reviewed to impart career-prolonging health maintenance and stress reduction techniques. Subtle yet critical aviation issues such as situational awareness and crew resource management will be explored. Prerequisite (s): AVN 202 with a grade of C or higher Credits: 3

Admission to Farmingdale State College - State University of New York is based on the qualifications of the applicant without regard to age, sex, marital or military status, race, color, creed, religion, national origin, disability or sexual orientation.