## Metropolitan State University of Denver Aviation Technology Major, B.S.: Professional Flight Officer Concentration Minor (required): Fall 2012 Catalog

| First Year              | Suggested Course plan   | Prerequisites                    | Alternative Course Plan      |
|-------------------------|---|----------------------------------|------------------------------|
| Fall: 16 credit hours   | AES 1100 (6) Aviation Fundamentals (F, S)   |                                  |                              |
|                         | AES 1400 (3) Aviation Weather (F, S, Su)  |                                  |                              |
|                         | AES 1710 (3) Single Engine Flight Sim. I (F, S)                                   |                                  |                              |
|                         | MTH 1110 (4) College Algebra <b>OR</b> MTH 1112 (4) College Algebra thru Modeling | Appropriate placement test score |                              |
|                         | OR MTH 1310 (4) Finite Mathematics (F, S, Su)                                     |                                  |                              |
|                         |   |                                  | TOTAL SEMESTER CREDIT HOURS: |
| Spring: 15 credit hours | ENG 1010 (3) Freshman Composition: The Essay (F, S, Su)                           | Appropriate placement test score |                              |
|                         | PHI 1030 (3) Introduction to Ethics (F, S, Su)                                    |                                  |                              |
|                         | PHY 1250 (6) Physics of Aviation (F, S)   | MTH 1110, 1310, or equivalent    |                              |
|                         | SPE 1010 (3) Public Speaking (F, S, Su)   |                                  |                              |
|                         |   | 1                                | TOTAL SEMESTER CREDIT HOURS: |

| Second Year                | Suggested Course plan   | Prerequisite                                   | Alternative Course Plan      |
|----------------------------|---|--|------------------------------|
| Fall: 15 credit hours      | AES 2110 (6) Commercial/Instrument Ground (F, S)  | AES 1100 and 1400                              |                              |
|                            | ECO 2010 (3) Principles of Macroeconomics (F, S, Su)                                      | ENG 1010 or 1020; any<br>1000-level MTH course |                              |
|                            | ENG 1020 (3) Freshman Composition:<br>Analysis, Research, & Documentation (F, S,<br>Su)   | ENG 1010                                       |                              |
|                            | Historical (3)-recommend HIS 1920, HIS 3090, or HIS 3590 (multicultural) (F, S, Su)       |  |                              |
|                            |   |  | TOTAL SEMESTER CREDIT HOURS: |
| Spring: 13-15 credit hours | AES Elective (F, S) (replaces AES 2150)   |  |                              |
|                            | AES 2710 (3) Instrument Flight Simulation I (F, S)  | AES 2110                                       |                              |
|                            | ECO 2020 (3) Principles of Microeconomics (F, S, Su)                                      | ENG 1010 or 1020; any<br>1000-level MTH course |                              |
|                            | Arts & Humanities (3) ARTH 1600 or ENG 2850 are recommended (Global Diversity) (F, S, Su) | ENG 1010 (ARTH 1600)<br>ENG 1020 (ENG 2850)    |                              |
|                            | Minor (3)   |  |                              |
|                            |   |  |                              |

| Third Year                 | Suggested Course plan   | Prerequisite   | Alternative Course Plan      |
|----------------------------|---|--|------------------------------|
| Fall: 15 credit<br>hours   | AES 3000 (3) Aircraft Systems & Propulsion (F, S)                                     | AES 1100 or FAA Priv. Pilot<br>Cert.; PHY 1250 or<br>permission of instructor  |                              |
|                            | AES 3460 (3) Weather for Aircrews ( <b>F</b> , <b>S</b> )                             | AES 1400; At least Junior<br>Standing or permission of<br>instructor   |                              |
|                            | AES 3880 (3) Aviation Security (F, S)   | At least Junior standing   |                              |
|                            | Minor (3)   |  |                              |
|                            | Minor (3)   |  |                              |
|                            |   |  | TOTAL SEMESTER CREDIT HOURS: |
|                            |   |  | <del>-</del>                 |
| Spring: 15<br>credit hours | AES 3530 (3) Aerodynamics (F, S)  | PHY 1250   |                              |
|                            | AES 4040 (3) Aircraft Performance (F, S)  | AES 1100, AES 3530, & at least Junior standing   |                              |
|                            | AES 3710 (3) Multi-Engine Flight Sim. I <b>OR</b>                                     | FAA commercial/instrument certificate or permission of instructor  |                              |
|                            | AES 4710 (4) Turboprop Flight Simulation ( <b>F</b> , <b>S</b> )                      | AES 2710; Senior standing; FAA Private Pilot certificate with instrument rating; Commercial Pilot Certificate; and Multiengine rating or AES 3710. |                              |
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|                            |   |  |                              |
|                            | AES 3850 (3) Human Factors & Physiology of Flight ( <b>F</b> , <b>S</b> , <b>Su</b> ) | At least Junior standing   |                              |
|                            | Minor (3)   |  |                              |
|                            |   |  | TOTAL SEMESTER CREDIT HOURS: |

| Fourth Year                | Suggested Course plan   | Prerequisite   | Alternative Course Plan      |
|----------------------------|---|--|------------------------------|
| Fall: 15 credit hours      | AES 4370 (3) Advanced Navigation Systems (F, S)                               | AES 1100 & at least Junior standing  |                              |
|                            | AES 4860 (3) Aviation Safety (F, S)   | Senior standing  |                              |
|                            | AES 4910 (3) Aviation Management & Job Targeting ( <b>F</b> , <b>S</b> )      | Aerospace Science major & senior standing or permission of instructor            |                              |
|                            | Minor (3)   |  |                              |
|                            |   |  | TOTAL SEMESTER CREDIT HOURS: |
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| Spring: 15<br>credit hours | AES 4930 (3) Professional Flight Standards<br>Seminar ( <b>F</b> , <b>S</b> ) | Senior standing; AES 3000,<br>AES 4040, & FAA<br>Commercial Pilot Certificate    |                              |
|                            |   | with instrument rating   |                              |
|                            | AES 4935 (6) Advanced Commercial Aircraft Systems ( <b>F</b> )                | Senior standing; AES 3000,<br>3530, 4040, and FAA<br>Commercial Certificate with |                              |
|                            |   | Instrument rating  |                              |
|                            | AES elective (3)  | 3  |                              |
|                            | Minor (3)   |  |                              |
|                            |   |  | TOTAL SEMESTER CREDIT HOURS: |

<sup>\*</sup>Professional Pilot Documentation required is required for graduation

|           | Suggested Course plan   | Prerequisite | Alternative Course Plan      |
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| Semester: |                         |              |                              |
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