

Aerospace Systems Engineering Technology (ASET) *Individualized Degree Program (IDP)*

Students interested in pursuing a Bachelor's of Science in the field of Aerospace Systems Engineering Technology may do so through the Individualized Degree Program (IDP) which allows for a combination of suggested coursework across multiple departments with the flexibility to meet the needs of the individual student.

Recommended General Studies for ASET

Level I General Studies (13 SH minimum)

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|--|---|
| Composition: ENG 1010 & ENG 1020 | 6 |
| Math: MTH 1110 College Algebra | 4 |
| Communication: SPE 1010 | 3 |

Level II General Studies (21 SH minimum)

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|---|---|
| Historical: Approved course* | 3 |
| Arts & Letters: PHI 1030 Ethics | 3 |
| Approved Arts & Letters course* | 3 |
| Social Sciences: ECO 2010 & ECO 2020 | 6 |
| Natural Science: PHY 2311 General Physics I | 4 |
| PHY 2321 Laboratory | 1 |

* Could also satisfy multicultural requirements.

Multicultural Requirement (3 SH minimum)

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|--|---|
| Multicultural: Approved Elective | 3 |
|--|---|

Recommended Courses for ASET - IDP

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|--|---|
| AES 2050 Aviation History & Aerospace Dev | 3 |
| AES 3000 Aircraft Systems and Propulsion | 3 |
| AES 3530 Aerodynamics | 3 |
| AES 3600 Space Flight Operations I (-or- MET 190B C-SMARTS) | 3 |
| AES 4601 Space Flight Operations II | 3 |
| AES 4602 Aerospace Commercialized Ops | 3 |
| AES 4603 Aerospace Ops Sys Anal & Design | 3 |
| AES XXXX Special Topics in Space Science (SE) .. | 4 |
| CHE 1800 General Chemistry I..... | 4 |
| COM 2610 Introduction to Technical Writing | 3 |
| EET 2000 Electric Circuits and Machines | 3 |
| MET 1010 Manufacturing Processes | 3 |
| MET 1200 Technical Drawing I | 3 |
| MET 1310 Principles of Quality Assurance | 3 |
| MET 2150 Mechanics I - Statics | 3 |
| MET 2200 Materials of Engineering | 3 |
| MET 3110 Thermodynamics | 3 |
| MET 3160 Mechanics II - Dynamics | 3 |
| MET 3130 Mechanics of Materials | 3 |
| MET 3135 Mechanics of Materials - Laboratory . | 1 |
| MET 3180 Fluids Mechanics I | 3 |
| MET 3210 Intro Computer Aided Engineering ... | 4 |
| MET 3410 Geom Dimensioning & Tolerances | 3 |
| MET 4000 Project Engineering | 3 |
| AES XXXX Research Methods I | 3 |

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|-------------------------------------|---|
| MET XXXX Research Methods II | 3 |
| MTH 1120 College Trigonometry | 3 |
| MTH 1410 Calculus 1 | 4 |
| MTH 2410 Calculus II | 4 |
| PHY 2331 General Physics II | 4 |
| PHY 2341 General Physics II | 1 |

Recommended course sequence (128 - 131)

Semester 1

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|--------------|
| CHE 1800 (4) |
| ENG 1010 (3) |
| MET 1010 (3) |
| MTH 1110 (4) |
| AES 2050 (3) |

Subtotal 17

Semester 3

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|---------------------|
| MET 1310 (3) |
| A&L elective (3) |
| MTH 1410 (4) |
| PHI 1030 (3) |
| <u>COM 2610 (3)</u> |
| <u>Subtotal 16</u> |

Semester 5

| |
|---------------------|
| PHY 2331 (4) |
| PHY 2341 (1) |
| MET 2200 (3) |
| MET 3160 (3) |
| ECO 2020 (3) |
| <u>EET 2000 (3)</u> |
| <u>Subtotal 17</u> |

Semester 7

| |
|---------------------|
| AES 4601 (3) |
| MET 3210 (4) |
| AES 3530 (3) |
| MET 4000 (3) |
| <u>AES XXXX (3)</u> |
| <u>Subtotal 16</u> |

Semester 2

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|---------------------------|
| SPE 1010 (3) |
| ECO 2010 (3) |
| ENG 1020 (3) |
| AES 3600/ MET 190B (3) |
| MET 1200 (3) |
| <u>MTH 1120 (3)</u> |
| <u>Subtotal 18</u> |

Semester 4

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|----------------------|
| PHY 2311 (4) |
| PHY 2321 (1) |
| MTH 2410 (4) |
| History elective (3) |
| <u>MET 2150 (3)</u> |
| <u>Subtotal 15</u> |

Semester 6

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|--------------|
| MET 3110 (3) |
| MET 3130 (3) |
| MET 3135 (1) |
| MET 3180 (3) |
| AES 3000 (3) |

Subtotal 13

Semester 8

| |
|---------------------|
| AES 4602 (3) |
| AES 4603 (3) |
| MET 3410 (3) |
| AES XXXX (4) |
| <u>AES XXXX (3)</u> |
| <u>Subtotal 16</u> |

⁺ NOTE: Students completing AES 3530, 3600, 4601, 4602, 4603 will also earn an MSU Denver Certificate in Space Commercialization.