## AEROSPACE ENGINEERING

Catalog Term: Fall 2017

| FRESHMAN  |  |
|---|--|
| FALL  | SPRING   |
| ENGL 101 (3)<br>College English I               | ENGL 102 (3) College English II P: ENGL 101 with grade C or better |
| IME 222 (2)                                     | AE 227 (3)   |
| Engineering Graphics P: MATH 123                | Engr. Digital Computations<br>(Fall/Spring)<br>C: MATH 243         |
| IME 222 L (1)                                   | MATH 243 (5)   |
| Engineering Graphics Lab                        | Calculus II  |
| P: MATH 123                                     | P: Math 242 with C or better                                       |
| MATH 242 (5)<br>Calculus I                      | PHYS 313 (4) Physics for Scientist I                               |
| P: See Catalog                                  | C: MATH 243  |
| CHEM 211 (5) General Chemistry I P: See Catalog | PHYS 315 (1) University Physics Lab I C: PHYS 313                  |
|   |  |

| JUNIOR                                    |   |  |
|---|---|--|
| FALL                                      | SPRING                                    |  |
| <b>GE Core (3</b> )                       | AE 502 (3)                                |  |
| Intro Social & Behavior Science           | Aero Propulsion I                         |  |
|   | (Spring <u>Only</u> )                     |  |
| (Choose any discipline)                   | P: AE 227, 373, ME 398C: AE 424           |  |
| PHIL 385 (3)                              | AE 512 (3)                                |  |
| Engineering Ethics                        | Exper. Methods in Aerospace (Fall/Spring) |  |
|   | P: AE 333, 424 C: AE 524                  |  |
| P: Junior or Senior Standing              |   |  |
| IME 255 (3)                               | AE 514 (3)                                |  |
| Engineering Economy                       | Flight Dynamics & Control                 |  |
| C: MATH 242                               | (Spring <u>only)</u>                      |  |
| AE 415 (3)                                | P: AE 415 C: AE 424<br><b>AE 524 (3)</b>  |  |
| Intro to Space Design                     | AE 324 (3) Aerodynamics II                |  |
| (Fall <u>Only</u> )                       | (Fall/Spring)                             |  |
| P: AE 373 with C or better<br>C: MATH 555 | P: AE 424                                 |  |
| AE 424 (3)                                | AE 62E (2)                                |  |
| Aerodynamics I                            | <b>AE 625 (3)</b><br>Flight Structures II |  |
| (Fall/Spring)                             | (Spring only)                             |  |
| P: AE 324 with C or better, AE            | P: AE 525                                 |  |
| 373, MATH 555<br><b>AE 525 (3)</b>        |   |  |
| Flight Structures I                       |   |  |
| (Fall <u>Only</u> )                       |   |  |
| P: AE 333 with C or Better                |   |  |
| C: MATH 555                               |   |  |

| SOPHOMORE                                    |   |  |
|--|---|--|
| FALL   | SPRING  |  |
| GE Core (3)                                  | GE Core (3)   |  |
| Intro Fine Arts                              | Intro Humanities  |  |
| COMM 111 (3)                                 | AE 373 (3)  |  |
| Public Speaking                              | Dynamics<br>(Fall/Spring/Summer)<br>P: MATH 344, AE 223 with C or<br>better |  |
| ME 250 (3)  Materials Engineering            | AE 333 (3) Mech. of Materials (Fall/Spring/Summer)                          |  |
| P: MATH 242 and CHEM 211 with C or better    | P: AE 223 with C or better<br>C: MATH 344                                   |  |
| MATH 344 (3)<br>Calculus III                 | MATH 555 (3)  |  |
|  | Differential Equations  |  |
| Math 243 with C or better                    | P: MATH 243 with C or better  |  |
| PHYS 314 (4) Physics for Scientist II        | ME 398 (3)<br>Thermodynamics I  |  |
| P: MATH 243 with C or better,<br>PHYS 313    | P: MATH 243 and PHYS 313<br>with C or better                                |  |
| AE 223 (3)                                   | AE 324 (3)  |  |
| Statics                                      | Fund. of Atmospheric Flight   |  |
| (Fall/Spring/Summer) P: PHYS 313 C: MATH 243 | (Fall/Spring) P: AE 223 with C or better C: AE 227                          |  |

| SENIOR   |   |
|--|---|
| FALL   | SPRING  |
| GE Core (3) Intro Social & Behavioral Science (From a different discipline than previous course) | GE Core (3)  Advanced Further Studies in Humanities OR Social & Behavioral Sciences (Not in PHIL) |
| EE 282 (4) Circuits 1 C: Math 243  | Science Elective (3)  |
| <b>AE 607 (3)</b> Flight Control Systems (Fall <u>only</u> ) P: AE 514                           | Technical Elective (3)<br>(Fall/Spring)   |
| Technical Elective (3)<br>(Fall/Spring)  | Technical Elective (3)<br>(Fall/Spring)   |
| <b>AE 528 (4)</b><br>Aerospace Design I<br>(Fall <u>Only)</u>                                    | AE 628 (4)<br>Aerospace Design II<br>(Spring <u>only</u> )  |
| P: AE 502, 514, 525  | P: AE 528   |

Notes: Students must also fulfill three Engineer 2020 requirements before graduation. Prerequisites for all ME courses must be passed with a grade that generates 2.0 or more credit points per credit hour. Humanities/Fine Arts/Social & Behavioral Science/Natural Science courses must be from an approved list. A C-minus does not meet "C or better" requirements.

P: Prerequisite C: Corequisite Last Updated: 06/2017