

Name: \_\_\_\_\_

UID#: \_\_\_\_\_

# AEROSPACE ENGINEERING

## CORE GENERAL EDUCATION PROGRAM

### Fundamental Studies (6 credits)

Academic Writing - ENGL 101 _____	3
Technical Writing - ENGL 393 _____	3

### Distributive Studies (18 credits) Lower level courses

#### *Humanities and the Arts (9 credits)*

Literature (HL) _____	3
Arts (HA) _____	3
Other Humanities (HA, HL, HO, IE ☼) _____	3

#### *Social and Behavioral Sciences (9 credits)*

Social/Political History (SH) _____	3
Behavior/Social Science (SB) _____	3
Behavior/Social Science (SB, IE ☼) _____	3

☼ Only one Interdisciplinary & Emerging Issues (IE) course can be taken in place of a third humanities or behavior/social science course.

### Advanced Studies (6 credits) Upper level courses

Must be courses outside of your major department or may include an approved Capstone course in your major

_____	0/3
ENAE 482 or ENAE 484 - Systems Design** _____	**0

\* May be required depending upon credit count. See department advisor for more information.

\*\* CORE Approved Capstone Course.

### Diversity (3 credits)

One course from approved list (D) _____	0/3
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## MAJOR REQUIREMENTS

### Basic Sciences

CHEM 135 - Chem for Eng _____	3
PHYS 161 - General Physics I _____	3
PHYS 260 & 261 - Gen Physics II & Lab _____	4
PHYS 270 & 271 - Gen Physics III & Lab _____	4
MATH 140 - Calculus I _____	4
MATH 141 - Calculus II _____	4
MATH 240 or 461 - Linear Algebra _____	4 or 3
MATH 241 - Calculus III _____	4
MATH 246 - Differential Equations _____	3

### Engineering Sciences

ENES 100 - Intro to Eng Design _____	3
ENES 102 - Mechanics I _____	3
ENES 220 - Mechanics II _____	3

### Major Requirements

ENAE 100 - Aerospace Eng Profession _____	1
ENAE 200 - Aerospace Eng Profession II _____	1
ENAE 202 - Aerospace Computing _____	3
ENAE 283 - Intro to Aerospace Systems _____	3
ENAE 301 - Dynamics of Aerospace Systems _____	3
ENAE 311 - Aerodynamics I _____	3
ENAE 324 - Aerospace Structures _____	4
ENAE 362 - Aero Instrumentation & Experimentation _____	3
ENAE 380 - Flight Software Systems _____	3
ENAE 423 - Vibration & Aeroelasticity _____	3
ENAE 432 - Control of Aerospace Systems _____	3
ENAE 464 - Aerospace Eng Lab _____	3
ENAE 4XX - Elective or ENAE 398H - Honors Research Project _____	3

(See Department Advisor for appropriate elective)

Choose one of the following tracks:

### Aeronautical Track

ENAE 403 - Aircraft Flight Dynamics _____	3
ENAE 414 - Aerodynamics II _____	3
ENAE 455 - Aircraft Propulsion & Power _____	3
ENAE 481 - Principles of Aircraft Design _____	3
ENAE 482 - Aeronautical Systems Design _____	3

### **OR**

### Space Systems Track

ENAE 404 - Space Flight Dynamics _____	3
ENAE 441 - Space Navigation & Guidance _____	3
ENAE 457 - Space Propulsion & Power _____	3
ENAE 483 - Princ of Space Systems Design _____	3
ENAE 484 - Space Systems Design _____	3

### Technical Requirements

ENES232-Thermodynamics _____	3
Technical Elective - 4XX** _____	3

\*\* Technical elective must be a technical 300 or 400 level course outside of the department approved by your departmental advisor. MATH 461 or ENME 320 cannot be used.

### **NOTES**

All engineering and technical courses must be completed with a grade of 2.0 or better.

All degree courses must be taken for a regular grade.

A minimum of **124 credits** and completion of all degree requirements is required for graduation.

The responsibility for meeting all graduation requirements rests with the student.

Track your degree progress using Degree Navigator

[www.testudo.umd.edu/dnentry.html](http://www.testudo.umd.edu/dnentry.html)