TO: The Faculty of the College of Engineering

FROM: School of Aeronautics and Astronautics of the College of Engineering

RE: Curriculum Change for the B.S. Degree in Aeronautical and Astronautical Engineering

The faculty of the School of Aeronautics and Astronautics has approved the following new changes in the curriculum for the B.S. degree in Aeronautical and Astronautical Engineering effective for students entering the School in the Fall Semester 2018. This action is now submitted to the Engineering Faculty with a recommendation for approval.

New Requirements: A new honors course number has been established in First Year Engineering, ENGR 16200.

Reason: Incorporated ENGR 16200 into AAE curriculum as acceptable for PHYS 17200
Current
Program Requirements

Fall 1st Year
MA 16500 - Analytic Geometry And Calculus I
CHM 11500 - General Chemistry *

ENGL 10600 - First-Year Composition * or
ENGL 10800 - Accelerated First-Year Composition *

ENGR 13100 - Transforming Ideas To Innovation I *
CGT 16300 - Graphical Communication And Spatial Analysis **
15 Credits

Spring 1st Year
MA 16600 - Analytic Geometry And Calculus II
PHYS 17200 - Modern Mechanics *

CS 15900 - Programming Applications For Engineers **
ENGR 13200 - Transforming Ideas To Innovation II *
COM 11400 - Fundamentals Of Speech Communication *
16 Credits
Note: Students planning to enter AAE are encouraged to take CGT 16300 and CS 15900 in the freshman year. CS 15900 is recommended as the Science Selective.

Fall 2nd Year
AAE 20300 - Aeromechanics I ++
AAE 25100 - Introduction To Aerospace Design
MA 26100 - Multivariate Calculus
Gen Elective I - Credit Hours: 3.00
MA 26500 - Linear Algebra *
AAE 20000 - Undergraduate Sophomore Seminar
16 Credits

Proposed
Program Requirements

Fall 1st Year
Same
Same

Same
Same

Same
Same

Same
Same

Spring 1st Year
Same
PHYS 17200 - Modern Mechanics or ENGR 16200 Honors introduction to innovation and the physical science of engineering design II

Same
Same
Same
Same

Fall 2nd Year
Same
Same
Same
Same
Same
Same
Same
### Spring 2nd Year
- AAE 20400 - Aeromechanics II ++
- AAF 20401 - Aeromechanics II Laboratory
- PHYS 24100 - Electricity And Optics **
- MA 26600 - Ordinary Differential Equations
- ME 20000 - Thermodynamics I **
- Gen Elective II - Credit Hours: 3.00
- 16 Credits

### Fall 3rd Year
- AAE 33300 - Fluid Mechanics
- AAE 33301 - Fluid Mechanics Laboratory
- AAE 35200 - Structural Analysis I
- MA 30400 - Differential Equations And Analysis Of Nonlinear Systems For Engineering And The Sciences
- AAE 30100 - Signal Analysis For Aerospace Engineering
- AAE 30000 - Undergraduate Junior Seminar
- Gen Elective III - Credit Hours: 3.00
- 16 Credits

### Spring 3rd Year
- AAE 33400 - Aerodynamics
- AAE 33401 - Aerodynamics Laboratory or
- AAE 35201 - Structural Analysis I Laboratory
- AAE 33800 - Thermal Sciences or
- AAE 33900 - Aerospace Propulsion
- AAE 34000 - Dynamics And Vibrations
- AAE 36400 - Control System Analysis
- Gen Elective IV - Credit Hours: 3.00
- 16 Credits

### Fall 4th Year
- AAE 36401 - Control Systems Laboratory
- Major Concentration Area/AAE Selective - Credit Hours: 6.00
- Gen Elective V - Credit Hours: 3.00
- Tech Elective - Credit Hours: 3.00
- AAE 40000 - Undergraduate Senior Seminar
- AAE 42100 - Flight Dynamics And Control or Tech Elective
- 17 Credits
Spring 4th Year
AAE 44000 - Spacecraft Attitude Dynamics or Tech Elective
Major Concentration Area/AAE Selective - Credit Hours: 9.00
Gen Elective VI - Credit Hours: 3.00

AAE 45000 - Spacecraft Design or
AAE 45100 - Aircraft Design
18 Credits

Note
*Satisfies a University Core Requirement
**Satisfies a Non-departmental Major Course Requirement
++Students must earn a "C-" or better
130 semester credits required for Bachelor of Science degree.
2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirement
The student is ultimately responsible for knowing and completing all degree requirements.
The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Critical Course
The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Foreign Language Courses
Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:
American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

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School of Aeronautics and Astronautics