## Accelerated Undergraduate-Graduate Programs

### Aerospace Engineering - Accelerated

#### Undergraduate-Graduate Program (B.S.A.E. / M.S.A.E., M.S.M.E. or M.S.BM.E.)

College of Engineering and Computer Science  
Department of Mechanical and Computer Engineering,  
Engineering, Room: 381  
[http://www.mae.ucf.edu](http://www.mae.ucf.edu)

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### Admission Requirements
- See Common Program Prerequisites.
- Qualified students may apply after completion of a minimum of 64 credit hours.
- Completion of no more than 96 credit hours.
- Admission to the Accelerated Program does not guarantee formal admission to the MSAE, MSME or MSBME program.
- Admission is not automatic. Interested students may need to be interviewed.

### Degree Requirements
- None

1. **UCF General Education Program (GEP) (38 hrs)**
   - See Aerospace Engineering major in catalog for GEP requirements.
   - **A:** Communication Foundations  
   - **B:** Cultural & Historical Foundations  
   - **C:** Mathematical Foundations  
   - **D:** Social Foundations  
   - **E:** Science Foundations

2. **Common Program Prerequisites (CPP) (19 hrs)**
   - See Aerospace Engineering major in the catalog for the CPP requirements.

3. **Core Requirements: Basic Level (2 hrs)**
   - The College of Engineering and Computer Science requires all engineering students to achieve a minimum 2.250 GPA in completing these courses, together with the core requirements, technical elective courses and senior design courses listed. Independent study courses generally do not satisfy major requirements.
   - **EGN 1006C** Introduction to the Engineering Profession  
   - **EGN 1007C** Engineering Concepts and Methods

4. **Core Requirements: Advanced Level (51 hrs)**
   - **EGN 3310** Engineering Analysis-Statics 3 hrs  
   - **EGN 3343** Thermodynamics 3 hrs  
   - **EMA 3706** Structure and Properties of Aerospace Materials 3 hrs  
   - **EGN 3373** Principles of Electrical Engineering 3 hrs  
   - **STA 3032** Probability and Statistics for Engineers GEP  
   - **EAS 3101** Fundamentals of Aerodynamics 3 hrs  
   - **EAS 3800C** Aerospace Engineering Measurements 3 hrs  
   - **EAS 3810C** Design of Aerospace Experiments 3 hrs  
   - **EAS 4105** Flight Mechanics 3 hrs  
   - **EAS 4134** High-Speed Aerodynamics 3 hrs  
   - **EAS 4300** Aerothermodynamics of Propulsion Systems 3 hrs  
   - **EML 3034C** Modeling Methods in Mechanical and Aerospace Engineering 3 hrs  
   - **EGN 3601** Solid Mechanics 3 hrs  
   - **EAS 4200** Analysis & Design of Aerospace Structures 3 hrs  
   - **EGN 3321** Engineering Analysis-Dynamics 3 hrs  
   - **EML 4225** Introduction to Vibrations and Controls 3 hrs  
   - **EML 3701** Fluid Mechanics I 3 hrs  
   - **EML 4142** Heat Transfer 3 hrs  
   - **EAS 4700C** Aerospace Design I 3 hrs  
   - **EAS 4710C** Aerospace Design II 3 hrs

5. **Restricted Electives (12 hrs)**
   - Technical electives should be taken at the 5000 or 6000 level and are available in the BSAE program to address specific student interests in a variety of technical areas. Students must consult with their assigned academic advisor for a list of the approved technical electives and the semesters when specific courses of this type are to be offered.

6. **Capstone Requirements (6 hrs)**
   - These courses are a capstone experience to your engineering program and should be completed in your last 2 major semesters of study.
   - CECS encourages all engineering students to take the Fundamentals Exam during their senior year.
   - **EAS 4700C** Aerospace Design I 3 hrs
   - **EAS 4710C** Aerospace Design II 3 hrs

7. **Foreign Language Requirements**
   - Admission is not automatic. Interested students may need to be interviewed.

8. **Electives**
   - None

9. **Additional Requirements**
   - None

10. **Required Minors**
    - None

11. **Departmental Exit Requirements**
    - None

12. **University Minimum Exit Requirements**
    - A 2.0 UCF GPA  
    - 60 semester hours earned after CLEP awarded  
    - 48 semester hours of upper division credit completed  
    - 30 of the last 39 hours of course work must be completed in residency at UCF.
    - A maximum of 45 hours of extension, correspondence, CLEP, Credit by Exam, and Armed Forces credits permitted.
    - Complete the General Education Program, the Gordon Rule, and nine hours of Summer credit.

### Total Undergraduate Hours Required
- 128

### Total Combined Hours Required
- 146

### Honors In Major
- None

### Related Programs
- Mechanical Engineering
- Certificates
- None

### Related Minors
- Intelligent Robotic Systems (IRS) - Interdisciplinary
- Engineering Leadership

### Advising Notes
- The baccalaureate degree will be awarded when program requirements for the BS are met and students have completed a minimum of 128 hours of credit. Students will then be reclassified as graduate students. The MSAE, MSME or MSBME will be awarded on completion of the total program of study.
- The following will be waived for this joint degree program: The limit of nine hours to be shared between undergraduate and graduate programs. Undergraduate students taking graduate courses must be within nine hours of graduation. Undergraduate students taking graduate courses must not register for more than a total of twelve hours in that semester.
Transfer Notes
- None

Acceptable Substitutes for Transfer Courses
- None

Shared Courses (12 hrs)
- Up to 12 credit hours of approved 5000 and 6000 level courses of grades B (3.0) or better may be counted towards the BS and Masters degrees. These 12 credit hours will meet either technical elective or course requirements for the major. Contact the Graduate Coordinator in the Mechanical and Aerospace Engineering department for a list of acceptable courses.

Graduate Courses Link
- http://www.graduatecatalog.ucf.edu/content/Courses.aspx

Program Academic Learning Compacts
- Program Academic Learning Compacts (student learning outcomes) for undergraduate programs are located at: http://www.oeas.ucf.edu/alc/academic_learning_compacts.htm

Equipment Fees
- Part-Time Student: $45 per term
- Full-Time Student: $90 per term