March 3, 2005

Prof. Scott Wills
Chair, Institute Undergraduate Curriculum Committee
ECE – 0250

The School of Aerospace Engineering requests Institute Undergraduate Curriculum Committee approval of the following items, all of which have been approved by the AE faculty.

1. Modification of the degree requirements for the Bachelor of Aerospace Engineering. There is no net change in the number of credit hours required for the degree.
   a. **Modify** the Social Sciences requirement to read as follows:
      
      Social Sciences, twelve hours: must include HIST 2111, HIST 2112, POL 1101, PUBP 3000, or INTA 1200; must include ECON 2100, ECON 2105, ECON 2106, or a course satisfying the **Global Economics requirement of the International Plan degree designation**; refer to pages 31-32 for a list of approved courses to satisfy the remaining hours.

2. Allow students to pursue the International Plan degree designation in conjunction with satisfaction of the BSAE degree requirements. The School will not impose any additional restrictions on pursuit of the degree designator.

   Students can satisfy the course requirements for the degree designation within the existing credit hours for the degree through appropriate selection of electives. For example:
   a) Global economics, international relations, and area-focused courses – social sciences electives
   b) Culminating course – approved electives or incorporated into capstone design project
   c) Language courses – humanities electives (6 hours) and free electives (6 hours)

   Two sample 8-semester schedules are attached. These are examples only; students will be allowed to complete any international experience option allowed under the Institute requirements.

Thank you for your consideration of this request.

Lakshmi N. Sankar
Associate Chair for Undergraduate Programs

ENDORESED:

____________________  ____________________
Dean, College of Engineering          Provost
## BSAE (International Option #1)

### FIRST YEAR - FALL

<table>
<thead>
<tr>
<th>Course</th>
<th>HRS</th>
<th>Course</th>
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<tbody>
<tr>
<td>MATH 1501 CALCULUS I</td>
<td>4</td>
<td>MATH 1502 CALCULUS II</td>
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<tr>
<td>ENGL 1101 ENGLISH COMPOSITION I</td>
<td>3</td>
<td>ENGL 1102 ENGLISH COMPOSITION II</td>
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<tr>
<td>CHEM 1310 GENERAL CHEMISTRY</td>
<td>4</td>
<td>PHYS 2211 INTRODUCTORY PHYSICS I</td>
<td>4</td>
</tr>
<tr>
<td>CS 1371 COMPUTING FOR ENGINEERS</td>
<td>3</td>
<td>Language II</td>
<td>3</td>
</tr>
<tr>
<td>Language I</td>
<td>3</td>
<td>AE 1350 INTRODUCTION TO AE</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL SEMESTER HOURS =</strong></td>
<td><strong>17</strong></td>
<td><strong>TOTAL SEMESTER HOURS =</strong></td>
<td><strong>16</strong></td>
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### SECOND YEAR - FALL

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<th>Course</th>
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<tbody>
<tr>
<td>MATH 2401 CALCULUS III</td>
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<td>HIST 2111/2112 or POL 1101 or PUBP 3000 or INTA 1200</td>
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<tr>
<td>PHYS 2212 INTRODUCTORY PHYSICS II</td>
<td>4</td>
<td>AE 2220 DYNAMICS</td>
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<tr>
<td>COE 2001 Statics</td>
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<td>Language IV</td>
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<tr>
<td>Language III</td>
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<td>AE 3450: Thermo &amp; 1-D flow</td>
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<tr>
<td>Wellness</td>
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<td>AE 2020: Low Speed Aero</td>
<td>3</td>
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<tr>
<td>COE 3001: Deformable Bodies</td>
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<td><strong>TOTAL SEMESTER HOURS =</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>TOTAL SEMESTER HOURS =</strong></td>
<td><strong>16</strong></td>
<td><strong>TOTAL SEMESTER HOURS =</strong></td>
<td><strong>17</strong></td>
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### THIRD YEAR - FALL (Abroad)

<table>
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<th>Course</th>
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<td>Math 2403: Differential Equations</td>
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<td>Science Elective</td>
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<td>Free Electives</td>
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<td>MSE 2001 PRINCIPLES &amp; APPLICATIONS OF</td>
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<td>International economics/Business</td>
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<td>ECE 3741 INSTRUM &amp; ELECTRONICS LAB</td>
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<td>ECE 3710 CIRCUITS &amp; ELECTRONICS</td>
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<td>Social Science (International history)</td>
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<td><strong>13</strong></td>
<td><strong>TOTAL SEMESTER HOURS =</strong></td>
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### FOURTH YEAR - FALL

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>AE 3125 AEROSPACE STRUCTURAL ANALYSIS</td>
<td>4</td>
<td>AE 4220 AEROELASTICITY</td>
<td>3</td>
</tr>
<tr>
<td>AE 4350 DESIGN PROJECT I or 4356 SPACE SYSTEMS DESIGN PROJECT I</td>
<td>3</td>
<td>AE 4351 DESIGN PROJECT II or AE 4357 SPACE SYSTEMS DESIGN PROJECT II</td>
<td>3</td>
</tr>
<tr>
<td>AE 3051: Fluids Lab</td>
<td>2</td>
<td>AE 3051: Fluids Lab</td>
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</tr>
<tr>
<td>AE 3145 STRUCTURES LAB</td>
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<td>AE 4451 JET &amp; ROCKET PROPULSION</td>
<td>3</td>
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<tr>
<td>AE 4451 JET &amp; ROCKET PROPULSION</td>
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<td>AE 4525 CONTROL SYSTEMS DESIGN LAB</td>
<td>2</td>
</tr>
<tr>
<td>AE 3521 FLIGHT DYNAMICS</td>
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<td>LCC 3401 TECHNICAL COMMUNICATION</td>
<td>2</td>
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<td><strong>TOTAL SEMESTER HOURS =</strong></td>
<td><strong>17</strong></td>
<td><strong>TOTAL SEMESTER HOURS =</strong></td>
<td><strong>10</strong></td>
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**Total Hours:** 132
### FIRST YEAR - FALL
- **MATH 1501** CALCULUS I 4
- **ENGL 1101** ENGLISH COMPOSITION I 3
- **CHEM 1310** GENERAL CHEMISTRY 4
- **CS 1371** COMPUTING FOR ENGINEERS 3
- **Language I** 3
- **Wellness** 2
- **TOTAL SEMESTER HOURS = 17**

### FIRST YEAR - SPRING
- **MATH 1502** CALCULUS II 4
- **ENGL 1102** ENGLISH COMPOSITION II 3
- **PHYS 2211** INTRODUCTORY PHYSICS I 4
- **Language II** 3
- **AE 1350** INTRODUCTION TO AE 2
- **TOTAL SEMESTER HOURS = 18**

### SECOND YEAR - FALL
- **MATH 2401** CALCULUS III 4
- **PHYS 2212** INTRODUCTORY PHYSICS II 4
- **COE 2001** Statics 2
- **Language III** 3
- **AE 2020:** Low Speed Aero 3
- **TOTAL SEMESTER HOURS = 16**

### SECOND YEAR - SPRING
- **HIST 2111** or 2112 or **POL 1101** or **PUBP 3000** or **INTA 1200** 3
- **AE 2220** DYNAMICS 3
- **Language IV** 3
- **ECE 3710** 2
- **Math 2403** 4
- **TOTAL SEMESTER HOURS = 18**

### THIRD YEAR - FALL (at Ga Tech)
- **COE 3001** Deformable Bodies 3
- **EE 3741**: Lab 1
- **AE 3310** 3
- **AE 3515** 4
- **CE/AE/ME 1770** Graphics 3
- **AE3021** HIGH SPEED AERODYNAMICS 3
- **TOTAL SEMESTER HOURS = 17**

### THIRD YEAR - SPRING (Abroad)
- **Science Elective** 3
- **Free Electives** 4
- **Global Economy or related course** 3
- **International Affairs** 3
- **International History/Public Policy** 3
- **TOTAL SEMESTER HOURS = 18**

### FOURTH YEAR - FALL
- **AE 4220** AEROELASTICITY 3
- **AE 4350** DESIGN PROJECT I or 4356 SPACE SYSTEMS DESIGN PROJECT I 3
- **AE 3125** Aerospace Structural Analysis 4
- **AE 3145:** Structures Lab 1
- **AE 4451** JET & ROCKET PROPULSION 3
- **AE 3521**: Feedback Control 4
- **TOTAL SEMESTER HOURS = 17**

### FOURTH YEAR - SPRING
- **AE 4351** DESIGN PROJECT II or AE 4357 SPACE SYSTEMS DESIGN PROJECT II 3
- **AE 3051:** Fluids Lab 2
- **MSE 2001** 3
- **AE 4525** CONTROL SYSTEMS DESIGN LAB 2
- **LCC 3401** Technical Writing 2
- **TOTAL SEMESTER HOURS = 15**

Total Hours: 132