AEROASTRO
COURSE 16 STUDENT PROGRAM PLANNING/PROGRESS SHEETS

S.B. in Aerospace Engineering – ABET Accredited

Graduation requirements of 17 GIRs and 192-198 units beyond GIRs cannot be completed by taking 48 units each term. With the approval of his/her advisor, a student may need to carry a heavier load in at least two terms or enroll in IAP classes. Also note that units from departmental requirements that also fulfill the Lab and REST requirements (a total of 36 units) do not count in units beyond GIRs. A student will fill this unit gap in their departmental program by taking 36 additional elective units. Please check the current MIT Course Catalogue for the availability and description of each required subject.

Student ___________________________________________ Advisor ___________________________________________

(Last) (First) (M.I.)

Double Major (if any) _______________________________ Intended Graduation Year _______________________  

Below please indicate subjects completed and planned subjects by term to be taken [example: F21=Fall 2021; S22=Spring 2022].

I. General Requirements

A. General Institute Requirements (17 GIRS)

<table>
<thead>
<tr>
<th>Science (6)</th>
<th>HASS (total of 8)</th>
<th>Distribution (3)</th>
<th>Concentration (3-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry (3.091 or 5.11)</td>
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<td></td>
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<tr>
<td>Biology (7.______)</td>
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<tr>
<td>Physics I (8.01__)</td>
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<tr>
<td>Physics II (8.02__)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus I (18.01__)</td>
<td>Other HASS</td>
<td>Proposal Form</td>
<td>Completion Form</td>
</tr>
<tr>
<td>Calculus II (18.02__)</td>
<td></td>
<td></td>
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</tbody>
</table>

Note -- HASS-Distribution: students must take the 3 HASS-D subjects from each of the following categories: Arts, Humanities, and Social Sciences. See the current Course Catalogue for more information.

Institute Lab (1)  

| 16.405J | 6.0001-6.0002; 6.0001-16.0002 |
| 16.622  | 6.041                           |
| 16.821  | 16.001                          |
| 16.831J | 18.03 or 18.032                |

REST (2)

<table>
<thead>
<tr>
<th>Communication (satisfied through 4 subjects that can count elsewhere --1 CI-H each in freshman and sophomore years and 1 CI-M each in junior and senior years.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI-H ___________ CI-H ___________ (among subjects designated CI-H in the Course Catalogue)</td>
</tr>
</tbody>
</table>
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*Please see the Planned Calendar for Experimental and Capstone Subjects at http://aeroastro.mit.edu/academics/forms-documentation/undergraduate-forms-documentation.

B. **Unrestricted Electives** *(a minimum of 42 units, including UROP-for-credit and approved special topics)*

(Please list prerequisites, if any, in parentheses.)

__________________ ( )
__________________ ( )
__________________ ( )
__________________ ( )
__________________ ( )

II. **Departmental Requirements** *(a total of 150 units)*

A. **Core Subjects** *(108 units)*

(Prerequisites are italicized; coreqs are italicized; and underlined.)

___16.001 (8.01, 18.01, 18.02, 16.002, 18.03 or 18.032) ___ 6.0001 ( ) and 6.0002 or 16.0002 (6.0001)
___16.002 (18.01, 18.02, 8.02, 16.001, 18.03 or 18.032) ___ 16.06 (16.002, 16.003 or 16.004)
___16.003 (18.01, 18.02, 8.02, 18.03 or 18.032, 16.004) ___ 16.07 (16.001 or 16.002, 16.003 or 16.004)
___16.004 (18.01,18.02, 8.02, 18.03 or 18.032, 16.003, 3.091 or 5.11 ___ 16.09 (18.02) or ___ 6.041((18.02
___18.03 (18.02) or 18.032 (18.02)

B. **Professional Area Subjects** *(48 units)*

(Prerequisites are italicized; coreqs are also underlined.)

Fluid Mechanics -- **16.100** *(16.003, 16.004)
Materials and Structures -- **16.20** *(16.001)
Propulsion -- **16.50** *(16.003, 2.005 or 16.004)
Computational Tools -- **16.90** *(16.001, 16.002, 16.003, 16.004 or POI, 16.09 or 6.041)
Estimation and Control -- **16.30** *(16.06 or POI)
Computer Systems -- **6.111** *(6.002, 6.08, or 16.004); **16.35** *(1.00 or 6.0002)
Communication Systems -- **16.36** *(6.003 or 16.002, 16.09 or 6.041)
Humans and Automation -- **16.400** *(16.09 or 6.041, or POI), **16.410** *(6.0002 or 6.01)

**Requirements:** Students must take a minimum of 48 units (4 subjects), including subjects from at least 3 professional areas. For students who wish to complete an “option” in aerospace information technology, 36 of the 48 units must come from subjects other than 16.100, 16.20, 16.50, and 16.90. Note that the IT option is not a degree in itself.

1st subject ____________ ____________ 3rd ____________ ____________

2nd ____________ ____________ 4th ____________ ____________

C. **Laboratory/Capstone Subjects** *(24-30 units)*

(Prerequisites are italicized; coreqs. are also underlined.)

One of the following two subjects:
___16.82 Flight Vehicle Engin *(2 PAS), 12
___16.83J Space Systems Engin *(2 PAS), 12

Plus one of the following three sequences
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___16.405J Robotics: Science and Systems, 1.00 or 6.0001; 2.003, 6.006, 6.009, or 16.06; or POI, 12 ______
or
___16.621 Experimental Lab I (16.06 or 16.07), 6, and
___16.622 Experimental Lab II (16.621), 12
Note: the 16.62x sequence is offered infrequently.
or
___16.821* Flight Vehicle Devel, POI, 18
or
___16.831J** Space Systems Development, POI, 18

III. Term-by-Term Worksheet
(Please list below all subjects the student intends to take; the list can be updated as necessary.)

<table>
<thead>
<tr>
<th>FALL/IAP-Sophomore</th>
<th>SPRING—Sophomore</th>
</tr>
</thead>
<tbody>
<tr>
<td>(May include a sophomore exploratory subject in each term, including a non-elective subject or a “cross-registered” subject.)</td>
<td></td>
</tr>
</tbody>
</table>

| FALL/IAP-Junior | SPRING--Junior |

| FALL/IAP-Senior | SPRING--Senior |

* 16.821 and 16.831J are offered alternate years. Please check the “Course 16 Planned Calendar for Experimental and Capstone Subjects”.

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