Graduation requirements of 17 GIRs and 198 units beyond GIRs cannot be completed by taking 48 units each term. With the approval of his/her advisor, a student will 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 of required subjects and their descriptions.

Below please indicate subjects completed and planned subjects by term to be taken [example: F16=Fall 2015; S17 = Spring 2017].

I. General Requirements

A. General Institute Requirements (17 GIRS)

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

I. Institute Lab (1)

<table>
<thead>
<tr>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.622</td>
</tr>
<tr>
<td>16.821</td>
</tr>
<tr>
<td>16.831J</td>
</tr>
<tr>
<td>16.405J</td>
</tr>
</tbody>
</table>

I. REST (2)

<table>
<thead>
<tr>
<th>REST</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.00</td>
</tr>
<tr>
<td>6.041A-6.041B</td>
</tr>
<tr>
<td>16.001</td>
</tr>
<tr>
<td>18.03 or 18.034</td>
</tr>
</tbody>
</table>

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.

CI-H ____________ CI-H ____________ (among subjects designated CI-H in the Course Catalogue)
B. Unrestricted Electives (48 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.)


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 (16.004)
Propulsion -- 16.50 (16.004 or 2.005)
Computational Tools -- 16.90 (16.004 or permission of instructor, 16.09 or 6.041 or 6.041A-6.041B)
Estimation and Control -- 16.30 (16.06 or 6.302)
Computer Systems -- 6.111 (6.002, 6.071, or 16.004); 16.35 (1.00, 6.0002, or 6.005)
Communication Systems -- 16.36 (16.004 or 6.003, 16.09 or 6.041A-6.041B)
Humans and Automation -- 16.400 (6.041A-6.041B, 16.09, or permission of instructor), 16.410 (1.00 or 6.0002)

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 _______________ 4th _______________
2nd _______________ 4th _______________

C. Laboratory/Capstone Subjects (30 units)
(Prerequisites are italicized; coreqs. are also underlined.)

One of the following two subjects:

16.82 Flight Vehicle Engin (2 PAS or concentration subjects) 12
16.83J Space Systems Engin (2 PAS or concentration subjects) 12

Plus one of the following three sequences
Course 16 Program Planning

_____16.621 Experimental Lab I (16.06 or 16.07), and 6 _________
_____16.622 Experimental Lab II (16.621) 12 _________
or
_____16.821* Flight Vehicle Devel, permission of department 18 _________
or
_____16.831J** Space Systems Development, permission of department 18 _________
or
_____16.405J Robotics: Science and Systems, 1.00 or 6.0001; 2.003, 6.005, 6.006, 6.009, or 16.06; or permission of instructor

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

FALL/IAP—Sophomore

SPRING—Sophomore

(May include a sophomore exploratory subject in each term, including
a non-elective subject or a “cross-registered” subject.)

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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