

[Program progress and planning form](#)

**AEROASTRO
COURSE 16 STUDENT PROGRAM PLANNING/PROGRESS**

S.B. in Aerospace Engineering – ABET Accredited

This form is intended for students and advisors to devise a plan and keep track of student progress towards the completion of the requirements for the Bachelor of Science in Aerospace Engineering. Since students must satisfy 17 GIRS (~204 units) plus 192 units for the S.B. in 16, a student will most likely carry more than the normal 48-unit term load in at least two terms or enroll in a subject or a for-credit UROP during two Independent Activities Periods (IAP). 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. To meet the 192-unit requirement, students take a minimum of 48 unrestricted elective units, including UROP, additional HASS or math subjects. Please check the current *MIT Course Catalogue* for subject descriptions, prerequisites, and term schedules, as well as the current Course 16 calendar of capstone and lab subjects.

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: FA25=Fall 2025; SP26=Spring 2026, etc.].

I. General Requirements

A. General Institute Requirements (17 GIRS)

Science (6)

HASS (total of 8)

Distribution (3)

Concentration (3-4)

_____ Chemistry (3.091 or 5.11)

_____ Biology (7.____)

_____ Physics I (8.01__)

_____ Physics II (8.02__)

_____ Calculus I (18.01__)

Other HASS

Proposal Form _____

_____ Calculus II (18.02__)

Completion Form _____

HASS-Distribution: students must take the 3 HASS-D subjects from each of the following categories:
Arts, Humanities, and Social Sciences.

Institute Lab (1)

_____ 16.405J

_____ 16.811

_____ 16.821

_____ 16.831J

REST (2)

_____ 6.1000, 6.100A-6.100B, 6.100A-16.C20J

_____ 16.001

_____ 18.03 or 18.032

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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*)

CI-M*: ____ 16.405J ____ 16.82 ____ 16.83J ____ 16.85 ____ 16.811 ____ 16.821 ____ 16.831J

*Please see the **Course 16 Planned Calendar for Lab/Capstone subjects** at <http://aeroastro.mit.edu/academics/forms-documentation/undergraduate-forms-documentation>.

- B. Unrestricted Electives** (*a minimum of 48 units*). A subject that fulfills a student's GIR, core, professional area, capstone, or lab requirement cannot also count as an unrestricted elective.

Please list prerequisites, if any, in parentheses.

_____ () _____
 _____ () _____
 _____ () _____
 _____ () _____
 _____ () _____

II. Departmental Requirements (a total of 144 units)

A. Core Subjects (108 units)

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

____ 16.001 (<i>8.01, 18.01, 18.02, <u>16.002</u>, <u>18.03</u> or <u>18.032</u></i>)	____ 6.1000; 6.100A + 6.100B or 16.C20J (<i>6.100A</i>)
____ 16.002 (<i>18.01, 18.02, <u>8.02</u>, <u>16.001</u>, <u>18.03</u> or <u>18.032</u></i>)	____ 16.06 (<i>16.002</i>)
____ 16.003 (<i>18.01, 18.02, <u>8.02</u>, <u>18.03</u> or <u>18.032</u>, <u>16.004</u></i>)	____ 16.07 (<i>16.001 or 16.002, 16.003 or 16.004</i>)
____ 16.004 (<i>18.01, 18.02, <u>8.02</u>, <u>18.03</u> or <u>18.032</u>, <u>16.003</u>, <u>3.091</u> or <u>5.11</u></i>)	____ 16.09 (<i>18.02</i>) or ____ 6.3700 (<i>18.02</i>)
____ 18.03 (<i><u>18.02</u></i>) or 18.032 (<i><u>18.02</u></i>)	

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 6.3700*)
 Estimation and Control -- **16.30** (*16.06 or POI*)
 Computer Systems -- **6.2050** (*6.1910 or POI; **16.35** (1.00 or 6.100B or 16.C20J)*)
 Communication Systems -- **16.36** (*6.3000 or 16.002, 16.09 or 6.3700*)
 Humans and Automation -- **16.400** (*16.09 or 6.3700, or POI; **16.410** (6.100B or 16.C20J or 6.9080)*)

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, nor does it appear on the MIT diploma or transcript. Students can however list the IT option on their C.V.

1 st subject _____	3rd _____
2nd _____	4 th _____

C. Laboratory/Capstone Subjects (24 units)

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(Prerequisites are italicized; coreqs are also underlined.)

One of the following subjects:

- ____ 16.82 Flight Vehicle Engin (2 *PAS*), 12 _____
____ 16.83J Space Systems Engin (2 *PAS*), 12 _____
____ 16.85 Design & Testing of Autonomous Vehicles, 16.405J; 16.35, 16.410 or *POI*, 12 _____

Plus one of the following subjects:

- ____ 16.405J/6.4200J Robotics: Science and Systems (*1.00* or 6.100A & *2.003*, 6.1010, 6.1210,
or *16.06*; or *POI*, 12 _____
____ 16.811 Propulsion Sys Prototyping & Testing for Aerospace Engineers,
(16.001-002-003-004), 12 _____
____ 16.821 Flight Vehicle Development, *POI*, 12 _____
____ 16.831J Space Systems Development, *POI*, 12 _____

Please see the” Course 16 Planned Calendar for Laboratory and Capstone Subjects” at
(Insert link to Oli’s latest version FA25-SP29)

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

FALL/IAP-Junior

SPRING--Junior

FALL/IAP-Senior

SPRING--Senior