

## Guidelines for Proposing a New Undergraduate SB Degree Program to the MIT Faculty and its Standing Committees

*This overview provides general information about the process and sequence of steps involved in establishing a new undergraduate SB degree program. For information on proposing a new undergraduate minor, please visit the [Committee on Curricula](#) site.*

Consistent with the [guidelines for approval of new undergraduate degree programs](#), which were voted into place by the MIT Faculty in May 2003, the review of a new undergraduate degree program is a multi-committee process. The primary committees involved are the [Subcommittee on the Communication Requirement](#) (SOCR), the [Committee on the Undergraduate Program](#) (CUP), and the [Committee on Curricula](#) (CoC). Following review and approval by these committees, the Faculty Policy Committee (FPC) reviews new undergraduate degree proposals and determines whether they are ready to be presented and voted on at an Institute Faculty Meeting.

Prior to completing the [Proposal Form](#), please write to [new\\_degree@mit.edu](mailto:new_degree@mit.edu) for additional guidance and instruction.

Preliminary drafts are encouraged, particularly for proposals involving interdisciplinary and joint programs or proposals that raise questions concerning *Rules and Regulations of the Faculty* and/or other existing policies governing the undergraduate program. Draft proposals can be saved in MIT's [Program Management](#) system and shared with faculty committee staff for consultation. Proposals should not be submitted in final form until they have been vetted by the appropriate School and departmental curriculum committees.

On the proposal form, you will be asked to provide the following:

1. Basic information about the degree program
  - Rationale for establishing the program
  - Anticipated demand for the degree
  - Other programs that may be affected by the new program
2. A description of the curriculum
  - Structure and coherence
  - Required and recommended subjects offered by other programs
  - Programs with which there is substantial overlap
  - A degree chart and description of the program suitable for publication in the *MIT Bulletin*
  - Roadmaps for completion (from varying points of entry)
3. Answers to specific questions that pertain to each review committee's area of responsibility.

The form also explains the requirements concerning letters of support that must accompany the proposal.

Once submitted, proposals are routed through a workflow in the proposal system that corresponds to the steps outlined in section III of the [guidelines for approval of new undergraduate degree programs](#). The degree program approval process is iterative and somewhat fluid so that, with agreement among the reviewing committees, some discussions and considerations may move forward simultaneously. Proposals are not normally approved by SOCR, CUP, CoC, and FPC at the same meeting at which they are initially presented and discussed. Instead, the proposals may be discussed across several meetings, both in the presence of the proposers and in committee. The committees may also refer specific elements of a proposal to other entities for consideration and feedback.

Each committee focuses on different aspects of the proposal. In completing the form, please note that some sections are required by all review committees and others by some smaller set:

- SOCR is responsible for ensuring that each undergraduate degree program has appropriate communication-intensive subjects in the major (CI-M), as specified by the Institute's undergraduate Communication Requirement.
- CUP focuses primarily on administrative infrastructure, policy, and governance and oversight issues.
- CoC focuses primarily on the curriculum, including the educational rationale, the sustainability and structure of the program, and its compliance with existing policy and rules.
- FPC focuses on the process followed, any issues that are brought to its attention, and scheduling the item for consideration at a Faculty Meeting.

Proposals for a new degree type or for a new degree program that couples an undergraduate degree and a graduate degree follow a different review sequence. In these cases, the CUP and FPC reviews precede the CoC review. In the case of a combined undergraduate/graduate program, the Committee on Graduate Programs (CGP) must also indicate its approval.

The chart that follows illustrates the process and timeline for the review of new undergraduate degree programs.

<b>Step</b>	<b>Process</b>	<b>Review Body</b>	<b>Typical Timeline</b>
1.	Approval of program of communication-intensive subjects in the major (CI-Ms)	Subcommittee on the Communication Requirement (SOCR)	October / November
2.	Approval of the administration and governance of the program, including advising	Committee on the Undergraduate Program (CUP)	Follows SOCR approval, normally in November / December.
3.	Approval of the proposed curriculum	Committee on Curricula (CoC)	Follows CUP approval, normally in December / IAP.

4.	Approval for presentation to the Faculty	Faculty Policy Committee (FPC)	Follows CoC approval.
5.	Presentation and vote by the Faculty	MIT Faculty	Meets on the third Wednesday of the month during the academic year. <sup>1</sup> Motions to establish new degree programs are presented and held over to the next month for a vote. Programs must have Faculty approval before May to be offered in the following academic year. <sup>2</sup>
6.	<u>New degree types only:</u> Forwarded to the MIT Executive Committee and Corporation for final approvals	MIT Executive Committee and Corporation	The Executive Committee meets once a month during the academic year. The Corporation meets quarterly (September, December, March, May).

<sup>1</sup> September through May, excluding January.

<sup>2</sup> Approval requires a majority vote, with a minimum of 30 faculty members in attendance and voting.

### Contact Information

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Visit [this site](#) for individual committee and staff contacts.

### Guidelines for Degree Charts

The first section of the degree chart must summarize the General Institute Requirements (GIRs). Any items in the departmental program that also fulfill a GIR must be expressly identified here. Below is a sample GIR section from Course 9.

#### General Institute Requirements (GIRs)

#### Subjects

The General Institute Requirements include a Communication Requirement that is integrated into both the HASS Requirement and the requirements of each major; see details below.

#### Summary of Subject Requirements

Science Requirement	6
Humanities, Arts, and Social Sciences Requirement [three subjects can be satisfied by <a href="#">9.00</a> and two other HASS subjects in the Departmental Program]; at least two of these subjects must be designated as communication-intensive (CI-H) to fulfill the Communication Requirement.	8
Restricted Electives in Science and Technology (REST) Requirement [can be satisfied by <a href="#">6.0001/6.0002</a> and <a href="#">9.01</a> in the Departmental Program]	2
Laboratory Requirement (12 units) [can be satisfied by a laboratory in the Departmental Program]	1
<b>Total GIR Subjects Required for SB Degree</b>	<b>17</b>
<b>Physical Education and Wellness Requirement</b>	
Swimming requirement, plus four physical education and wellness courses for eight points.	

Departmental requirements follow immediately after the GIR summary and are introduced by the following statement:

**Departmental Program**

Choose at least two subjects in the major that are designated as communication-intensive (CI-M) to fulfill the Communication Requirement.

This section of the degree chart must clearly identify the structure of the program and the options within it. If the program is divided into subsections, each subsection heading should be clearly identified and should show the units of coursework that must be completed for that subsection. Express units as a range where appropriate. Examples:

<b>Required Subjects</b> [List subjects after subheading]	<b>36</b>
<b>Restricted Electives</b> [List subjects after subheading]	<b>21-24</b>

The following guidelines apply when listing subjects on a degree chart:

- List only one number for a joint subject.
- List subjects in numerical order wherever feasible.
- Identify a minimum of two CI-M subjects in the degree chart.
- Do not include Science Core subjects (Biology, Calculus I and II, Chemistry, Physics I and II), even if they are prerequisites for subjects in the program.

Choices between subjects may be designated in any of several ways. The most common are:

1. As a choice between subjects, for example:  
**4.021** Introduction to Architecture Design  
*or*  
**4.02A** Introduction to Architecture Design Intensive

2. As a choice from a list, for example:  
*Select one of the following:*  
**3.016** Mathematical Methods for Materials Scientists and Engineers  
**18.03** Differential Equations  
**18.034** Differential Equations
3. As a statement with a list of numbers, for example:  
 To satisfy the requirement that students take two CI-M subjects, students must take 24.260 *and* one of the following: 24.120, 24.201, 24.221, 24.231, 24.251, or 24.263.
4. As a statement that identifies requirements by area, for example:  
 Three additional subjects as specified in one of the following concentrations: Finance, Information Technologies, Marketing Science, Operations Research.

Examples 2-4 should be located at the end of a list of subjects. For example:

24.900	Introduction to Linguistics	12
24.901	Language and Its Structure I: Phonology	12
24.902	Language and Its Structure II: Syntax	12
...		
	<i>Select one of the following Linguistic Analysis subjects:</i>	12
24.909	Field Methods in Linguistics	
24.910	Advanced Topics in Linguistic Analysis	
24.914	Language Variation and Change	

At the end of the departmental requirements, the chart must indicate the units in major (required subjects + restricted electives), the units of credit for unrestricted electives (minimum of 48 required), and the units in major that also satisfy the GIRs, which are subtracted from the total number of units in the program. Each program must then summarize the total units beyond the GIRs required for SB degree, which should be expressed in a range if appropriate. The minimum number of “units beyond” is 180; the maximum allowed is 198.

<b>Units in Major</b>	<b>169-192</b>
<b>Unrestricted Electives</b>	<b>48-72</b>
<b>Departmental Program units that also satisfy the GIRs</b>	<b>(60)</b>
<b>Total Units Beyond the GIRs Required for the SB Degree</b>	<b>180</b>
The units for any subject that counts as one of the 17 GIR subjects cannot also be counted as units required beyond the GIRs.	

Other notes about the program may be inserted at the discretion of the department and/or the Committee on Curricula.

**Roadmaps: Sample Layout**

Roadmaps may include up to 8.5 subjects per year. A maximum of 12 units of required coursework may be available only during IAP, but programs must provide contingencies to ensure that a student’s program is not disrupted by circumstances beyond his or her control.

Six-unit subjects are counted as half-subjects; subjects of 9–15 units are counted as one subject; 18-unit subjects count as 1.5 subjects; and subjects of 21–24 units count as two subjects. The roadmaps must show at least 48 units of unrestricted electives, 12 of which should fall in the freshman year. Program requirements must include 180 (minimum) to 198 (maximum) units beyond the GIRs.

Below is a sample layout for a typical roadmap; GIR subjects are highlighted in red. Roadmaps must be provided for first-term sophomores, second-term sophomores, and first-term juniors.

	Fall		IAP	Spring	
Year 1	<b>Physics I</b>	12		<b>Physics II</b>	12
	<b>Chemistry</b>	12		<b>Calculus</b>	12
	<b>Calculus</b>	12		<b>HASS</b>	12
	<b>HASS (CI-H/CI-HW)</b>	12		Elective	12
				# subjects: 8	
				# subjects in major: 1	
				# units beyond GIRs: 12	
Year 2	<b>HASS (CI-H)</b>	12		<b>HASS</b>	12
	<b>Biology</b>	12			12
				# subjects:	
				# subjects in major:	
				# units beyond GIRs:	
Year 3	<b>HASS</b>	12		<b>HASS</b>	12
				# subjects:	
				# subjects in major:	
				# units beyond GIRs:	
Year 4	<b>HASS</b>	12		<b>HASS</b>	12
				# subjects:	
				# subjects in major:	
				# units beyond GIRs:	
	<b>Total # subjects in major:</b>			<b>Total units beyond GIRs:</b>	