

Student Name: _____

**Department of Chemical Engineering
Course 10-ENG Curriculum Planning Form**

This form must be submitted to the Chemical Engineering Undergraduate Officer within one semester of declaring Course 10-ENG. It must be signed by you, your academic advisor, and your 10-ENG concentration advisor.

Please list below the courses that you are planning to take and indicate the semester that you propose to take them.

General Institute Requirements

8.01x Term (F/S): Year (1-4):
8.02x Term (F/S): Year (1-4):
18.01x Term (F/S): Year (1-4):

18.02x Term (F/S): Year (1-4):
Chemistry: Term (F/S): Year (1-4):
Biology: Term (F/S): Year (1-4):

Core Subjects

5.601 Term (F/S): Year (1-4):
18.03 Term (F/S): Year (1-4):
10.10 Term (F/S): Year (1-4):
10.213 Term (F/S): Year (1-4):

10.301 Term (F/S): Year (1-4):
10.302 Term (F/S): Year (1-4):
10.37 Term (F/S): Year (1-4):

Foundational Concept Subjects

Students should choose three (3) subjects from a list of about 15 Foundational Concept Subjects. The Foundational Concept subjects of the flexible engineering degree consist of basic science and engineering courses that help lay the groundwork toward the chosen concentration. One of the foundational concept subjects must be a chemical engineering CI-M subject, and one must be a laboratory subject that satisfies the Institute Laboratory requirement.

<u>Subject</u>	<u>Number</u>	<u>Units</u>	<u>Term (F/S)</u>	<u>Year (1-4)</u>
1. <u>(CI-M)</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u>(LAB)</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Institute Communication Requirement

Please indicate the second subject to complete the MIT CI-M requirement. (The first is the Foundational Concept #1, chosen above; the other may be chosen from the list at <https://registrar.mit.edu/registration-academics/academic-requirements/communication-requirement/ci-m-subjects/subject>. This second subject may be included, if pertinent, within the Foundational Concepts or Concentration categories.)

<u>Subject</u>	<u>Number</u>	<u>Units</u>	<u>Term (F/S)</u>	<u>Year (1-4)</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

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Concentration

The flexible engineering concentration consists of four (4) subjects that are selected by the student either from a suggested subject list provided for each 10-ENG concentration, or subjects may be proposed by the student that fit the theme of the chosen concentration. The concentrations have been selected by the Department of Chemical Engineering to represent new and developing cross disciplinary areas that benefit from a strong foundation in engineering within the chemical engineering context. Lists of subjects for each concentration may be found at the Department web site: <http://web.mit.edu/cheme/academics/undergrad/10eng>.

	<u>Subject</u>	<u>Number</u>	<u>Units</u>	<u>Term (F/S)</u>	<u>Year (1-4)</u>
1.	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____

Concentration Guidelines

1. All Concentration subjects must be letter graded.
2. No Concentration subject may also be counted as a GIR, or toward the Foundational Concepts requirement.
3. UROPs are not allowed to count as part of the Concentration.
4. Each Concentration subject should have a relationship to the overall theme of the student's concentration.
5. Basic math and science or less closely related engineering subjects may be included in a Concentration only if they are a prerequisite to a higher level engineering subject in the Concentration; otherwise such subjects should be taken as unrestricted electives.

Capstone

The flexible engineering degree major capstone experience consists of 12 units total from any combination of the Integrated Chemical Engineering (ICE) (10.490) or the Integrated Chemical Engineering-Topic subjects (10.492A, 10.492B, 10.493, 10.494A, 10.494B) and/or a senior level project (10.910). Alternatively, the student may choose to complete a senior thesis (10.THU) in a topic area relevant to the concentration. Senior level projects or senior thesis projects are specifically designed to integrate engineering principles into specific applications or problems, and are not standard undergraduate research (UROP) projects; such projects require the approval of the 10-ENG advisor and ratification by the Department Undergraduate Officer.

	<u>Subject</u>	<u>Number</u>	<u>Units</u>	<u>Term (F/S)</u>	<u>Year (1-4)</u>
1.	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____

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Engineering and Science Topics Checklist

The seven subjects counted toward the Foundational Concepts plus the Concentration must include at least 60 units of engineering topics and 15 units of math and basic science topics. Please work with your advisor to indicate how this engineering and science content will be addressed by the chosen Foundational Concept and Concentration subjects in your curriculum.

Subject number	Subject Title	Total units	Engineering units	Science units
	Total:			

Amendments

As you proceed through your studies, it may be necessary or desirable to amend this program. Changes to the list of subjects requires re-execution of this form, including approvals by your 10-ENG advisor and by the Undergraduate Committee.

Signature and Approvals

I agree to complete all elements of the program given above. _____
(signature of student, date)

Approval of academic advisor: _____
(signature of academic advisor, date)

Approval of 10-ENG concentration advisor: _____
(signature of 10-ENG concentration advisor, date)

Approval of Undergraduate Committee: _____
(signature of Undergraduate Officer, date)