Department of Chemical Engineering
Course 10-ENG Enrollment Form

This form must be submitted to the Chemical Engineering Undergraduate Officer within one semester of declaring Course 10-ENG.

Name: _____ Student ID: _____
Class of: _____ E-mail: _____

Indicate below your chosen area of concentration

Biomedical _____ Materials Process & Design _____
Energy _____ Manufacturing Design _____
Engineering Computation _____ Process Data Analytics _____
Environment and Sustainability _____ Society, Engineering, Ethics _____
Other (please specify) _____

Using the space below, please explain why this concentration interests you, how it relates to your chemical engineering curriculum, and how it will benefit your career.

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 must choose one subject from each of Groups I, II and III, of the Foundational Concept Subjects. The Foundational Concept subjects consist of basic science and engineering courses that help lay the groundwork toward the chosen concentration. Group I will be a chemical engineering CI-M subject, and Group II will be an Institute Laboratory subject.

	Subject	Number	Units	Term (F/S)	Year (1-4)
I. (CI-M)					
II. (LAB)					
III.					

Institute Communication Requirement

Please indicate the second subject to complete the MIT CI-M requirement. (The first is the Foundational Concept I, 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 one of the Foundational Concepts or Concentration categories.)

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

Student Name: _____

Concentration

The Concentration consists of four (4) subjects that are either selected from a suggested subject list provided for each 10-ENG concentration, or 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: https://cheme.mit.edu/academics/undergraduate-students/undergraduate-programs/course-10-eng/.

	Subject	Number	Units	Term (F/S)	Year (1-4)
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.
If you have more than 12 units in the Capstone category (i.e., by taking 10.490) the extra units beyond 12 still count as elective engineering credit.

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

Student Name: _____

Engineering and Science Topics Checklist

One of the requirements of accreditation is that the 10-ENG degree include a total of 90 units of Math and Basic Science, as well as 135 units of Engineering. The Required part of the 10-ENG program has 81 units of Math and Basic Science and 69 units of Engineering. There are a further required 12 units of Engineering in Capstone. This leaves 9 units of Math and Basic Science and 54 units of engineering topics, that must be accomplished with Foundational Concepts, Concentration, excess Capstone units (e.g. if you took 10.490) and electives. Please work with your advisor to indicate how these requirements will be addressed by your chosen courses.

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. _____ Date:_____
(signature of student, date)

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

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

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