

Massachusetts Institute of Technology
TASK FORCE ON THE UNDERGRADUATE EDUCATIONAL COMMONS
Working Assumptions about MIT Education
Draft v.3 as of November 1, 2004

MIT enjoys an international reputation as one of the world's premier universities. This reputation is based not only on our advanced research but also on our exemplary commitment to educating undergraduates with a special emphasis on science and engineering. Despite our successes, we never have been complacent about our educational mission. The current Task Force on the Educational Commons is only the most recent example of our commitment to developing an adaptive undergraduate curriculum that reflects the continual evolution of basic knowledge and the changing face of modern society. Still in the early stages of its deliberations, the Task Force has distilled a set of themes from MIT's educational philosophy in order to frame its review of the General Institute Requirements.

A Persistent Passion for Learning

In their roles as mentors, MIT faculty members share with our undergraduates their love of learning. They encourage students to develop their own educational visions that will serve them here at MIT and beyond. They develop a culture that prepares these students for a lifetime of intellectual development. That culture emphasizes the value of creative thinking and learning through problem solving, practices that will serve our students well as they assume leadership roles in the society of tomorrow.

Intellectual Diversity

MIT has a unified faculty that takes corporate responsibility for the general education and welfare of our students. As a consequence of its own intellectual diversity, the faculty expects MIT students to develop diverse perspectives and the ability to combine multiple modes of inquiry to address fundamental questions and problems. Although science and engineering are fundamental components of our culture, they combine with the social sciences, the humanities, and the arts to form the core of modern higher education. MIT students should be at least familiar with each of these core areas by the time they graduate.

An Innovative Approach to Core Knowledge

MIT students are expected to develop a mastery of the factual and conceptual underpinnings of their chosen field of specialization. However, the nature of these fields is constantly changing, and our students will be expected to be pioneers in this evolutionary process. To

prepare them, the MIT faculty encourages students to venture off narrow educational pathways. Beyond exposure to a diverse set of ideas through the educational commons, our students are expected to embrace the kind of interdisciplinary thinking that drives innovation.

Collaborative Learning

Although MIT continues to value independent learning, there is an increasing emphasis here on collaborative research and design. Such initiatives underscore the importance of developing diverse perspectives and working as part of a community to address important problems.

Education for Responsible Leadership

An MIT education should be designed to encourage students to assume leadership roles in a global society. To be successful in those roles, they must develop a personal code of ethics to guide their future actions. MIT's focus on science and technology provides special opportunities to encourage students to reflect on the impact of science and technology on modern society.

As it reviews and considers the wisdom of modifying MIT's current general requirements, the Task Force has developed a strong sense that these themes are not sufficiently well communicated to our students. We hope this document initiates a discussion that results in a clear articulation of the educational philosophy of MIT. Ideally, the freshman year should begin with a dialogue between new students and faculty about this philosophy. More importantly, students must be encouraged – and given the time – to reflect on this philosophy and become active participants in the educational process throughout their tenure as undergraduates.