2012 MIT Incoming Freshman Survey

During the summer of 2012, the MIT Freshman Survey was administered to all incoming first-year students. 1,065 of the 1,147 incoming freshmen responded to the survey, yielding a 93% response rate. Survey questions asked students about their high school preparation, college decision process, expectations for college and freshmen year, finances, post-graduation plans, background, and measures of success. Below are some major findings.

Student Self-Description
- When describing themselves as students, 77% of respondents said they prefer to take courses that arouse curiosity, even if the course is difficult. 57% of respondents said getting the best grades they can is very important, while 49% are willing to work hard in a course to learn the material even if it won’t lead to a higher grade.

High School Experiences
- 68% of respondents attended a public high school, 30% attended a private high school, and 2% were home schooled or attended another type of school.
- 15% of respondents attended high school outside of the United States.
- 42% of respondents attended high schools that were mostly or entirely white students, while 19% attended mostly or entirely non-white schools.
- When asked whether or not they had experienced certain academic and non-academic achievements, the top three most-commonly experienced items were: learning to converse in a language other than English (86% of respondents), learning to deliver a speech arguing for a particular position (77%), and performing community service as part of a class or graduation requirement (69%).
- 50% of respondents took at least one college class during high school.
- 27% of respondents completed 5-7 Advanced Placement (AP) courses, and another 27% completed 8-10 AP courses.
- The most common extracurricular activity in high school was holding a leadership role in a student organization, club or team (90% of respondents) while the least common was participating in politics beyond voting (12%).

College Preparation
- The mean number of colleges or universities respondents applied to, including MIT, was 7.65 and the median was 7.
- 55% of respondents felt quite well or very well prepared to succeed academically at MIT.
- 75% of respondents felt quite well or very well prepared to succeed socially at MIT.
- When asked how prepared they felt on a range of college-level skills and abilities, the top three categories were: relating well to people of different races, nations and
religions (60% “very well prepared”), developing or clarifying a personal code of values or ethics (59%), and functioning independently without supervision (53%).

- The bottom three categories were: reading or speaking a foreign language (15% “unprepared”), developing a critical appreciation of art, music, literature, and drama (9%), and conducting scholarly research (8%).

College Expectations

Within which school are you most likely to major?

- When asked which academic areas they were most interested in, the top three categories were: mathematics, statistics, or computer science (72% “very interested”), engineering (65%), and physical sciences (64%).
- The bottom three categories were: history (15% “to be avoided”), area, ethnic, cultural, and gender studies (15%), and visual and performing arts (13%).
- Respondents were most likely to say they plan to major in the following areas: Electrical Engineering and Computer Science (12%), Physics (9%), Biological Engineering (9%)
- 42% of respondents were confident or very confident of their intended major.
- When asked which activities they would be most likely to participate in, the top three categories that resulted in a “very likely” response were: join a student club or organization (77%), have an internship (70%), and work with a professor on a research project (63%).
- Activities least likely to receive “very likely” responses were: start a company (6.4%), participate in ROTC or the National Guard (2.3%), and transfer to another institution (0.3%).
When asked “How important is it that MIT provide you with the following?” the top three categories that resulted in “essential” responses were: opportunities to discover and pursue your intellectual passion (85%), skills for lifelong learning (69%), and deep expertise in a specific discipline or area of study (64%).

Events that were least likely to result in “essential” responses were: a broad liberal arts education (11%), contact with individuals whose backgrounds are different from your own (32%), and a global perspective (44%).

How likely are you to do each of the following in college?

- Mean: 1=Not at all likely, 2=A little likely, 3=Somewhat likely, 4=Very likely

- A broad liberal arts education
- Contact with individuals whose backgrounds are different from your own
- A global perspective
- Opportunities to develop skills valuable in the workplace

Mean: 1=Not at all important, 2=Somewhat important, 3=Very important, 4=Essential

- Opportunities to discover and pursue your intellectual passion
- Skills for lifelong learning
- Deep expertise in a specific discipline or area of study
- Opportunities to develop skills valuable in the workplace
- A global perspective
- Contact with individuals whose backgrounds are different from your own
- A broad liberal arts education
Finances
- 58% of respondents reported receiving financial aid from MIT.
- 16% of respondents said they are Pell Grant recipients.
- 13% of respondents answered that they are “a great deal” worried about their family’s ability to pay for college.

After College
- 90% of respondents intended to pursue a graduate or professional degree after completing their bachelor’s degree.
- Of those who said they plan to pursue a graduate or professional degree, 48% intend to pursue a PhD, 47% a Master’s in Engineering, 20% a Master’s in the Arts and Sciences, 19% an MBA, 17% a medical degree, 3% a law degree, 4% another degree, while 25% are undecided about which advanced degree. (Respondents could select more than one answer.)
- When asked which activities were most important to respondents’ futures, the three most common responses were: contributing to science and innovation, being a leader in your field, and raising a family.
- The activities that were least important to respondents were: participating in religious activities, participating in politics or community affairs, and expressing yourself artistically. The chart on the following page reflects students’ mean responses.
How important is each of the following to you as you think about your own life and future?

- Contributing to science and innovation
- Being a leader in your field
- Raising a family
- Being well-off financially
- Traveling abroad
- Getting to know people from diverse backgrounds
- Doing creative and expressive work
- Learning about other cultures and nations
- Being a leader in your community
- Volunteering
- Working for social and political change
- Having managerial responsibility
- Doing work in accordance with your philosophy or religion
- Being successful in a business of your own
- Living or working abroad
- Expressing yourself artistically
- Participating in politics or community affairs
- Participating in religious activities

Mean: 1=Not important at all, 2=Somewhat important, 3=Very important, 4=Essential
Student Backgrounds

- 48% of respondents are female.
- 26% of respondents are non-native English speakers.
- 28% of respondents speak a mix of English and other language(s) at home and 18% speak entirely/mostly language(s) other than English at home.
- 42% of respondents described their political views as liberal or very liberal, 22% are moderate, 16% haven’t though much about it, and 14% are conservative or very conservative.
- 56% of respondents’ fathers and 44% of respondents’ mothers have a graduate or professional degree.

2012 MIT Incoming Freshman Survey: Open Ended Responses

At the end of the 2012 MIT Incoming Freshman Survey, students were asked the following two open-ended questions: “What are you looking forward to most in your first year at MIT?” and “What worries you the most?” Each response was read and coded by key themes and phrases. Below are representative student responses.

**What are you looking forward to most in your first year at MIT?**

Excitement surrounding academics and social interactions were common. Students looked forward to MIT’s academically challenging environment, coursework, and research. They also looked most forward to interacting with interesting people, peers, and faculty. Responses related to living independently and adapting to a new environment were also common.

Incoming freshmen were most looking forward to learning (31% of respondents) and their coursework (10%).

“I am most looking forward to taking intellectually stimulating classes that push my academic potential to its limit. I want to learn everything.”

“I am excited to push myself to my academic limits so I can discover what those limits are, because I have never been pushed to my academic limits before.”

“I am excited to learn and grow by not understanding everything immediately.”

“Awesome professors, doing problem sets, conducting research, meeting cool people, and learning a lot”

“Delving head first into electrical engineering and hopefully robotics! I also can’t wait to meet my fellow peers who will most likely change my view of the world.”
Respondents were also excited about academic challenges (13%), research (6%), and other opportunities and resources available at MIT (6%).

“The challenge. I'm hungering for a fast-pace environment where the challenges are dynamic, and where I am constantly thinking about the next thing to do.”

“Not being the smartest anymore. I want to hear what other people have to say and integrate their opinions and modes of thought into my own.”

“I am really looking forward to taking advantage of as many opportunities (UREP, MISTI, IROP, Outreach, etc.) at MIT as I can because when making my decision, opportunities at MIT versus opportunities at another top university was what I considered the most.”

Students were eager to interact with interesting, intelligent, and/or passionate people (29% of respondents) while others stated more specifically that they were excited to make friends (18%).

“I most look forward to being part of a scholarly environment where just about everyone is motivated and brilliant”

“I really want to meet a lot of people in my first year at MIT. I believe that participating in social activities is as important as doing a good job academically.”

“Being surrounded by intelligent, curious people who are capable of having both serious discussions and awesome parties.”

Some respondents were looking forward to meeting people with similar interests (7%) while others were looking forward to meeting people with diverse backgrounds (5%).

“I cannot wait to be around people that are incredibly intelligent and who think academically like me.”

“Being in an environment of fellow nerds, and not being the odd one out anymore. I also am excited to learn all that MIT has to offer.”

“A great education that is informative but not mundane and experiences that are diverse. I am also highly anticipating meeting new people and making new friends from different backgrounds.”

“I cannot wait for the diversity of the MIT community. My town is too small and too homogeneous; I am desperate for change!”
Students also looked forward to independence (12% of respondents), extracurricular activities (8%), and the general college experience (6%).

“I look forward to some independence, more control over how I live and what I do.”

“Just about everything! I can’t wait to experience the MIT culture, meet new people, take some amazing classes (and maybe pull off a good hack or two...)”

“Experiencing and adapting to college life and starting a new chapter in my life that will hopefully prepare me for the future.”

Other aspects freshman were looking forward to include living in the Boston area (5% of respondents), learning from faculty (4%), self-discovery (4%), a fresh start (4%), MIT culture (4%), and figuring out a major or career path (4%). The wide range of responses included figuring out a major/career path, Energy Initiative, hobby shop, and drinking from the fire hose.

“The biggest aspect that I am looking forward to is being part of the Boston/MIT community, from all of its advanced classes to the renown dance community”.

“Doing research with, learning in classes taught by, and discussing the world's current innovations and forefront movements with professors who have made a difference in the fields of science, engineering, and technology”

“Being in an environment where I can discover myself as a student, a scientist, and a person.”

“being able to reinvent myself to an extent”

“The people and the culture - it is amazing to be able to find a school which is just brimming with academic challenges and students who embrace this.”

What worries you the most?

While incoming freshmen were excited about the academic opportunities that await them at MIT, they were most worried about being able to live up to the high standards of academic success at MIT. Others were concerned about making friends and living away from home for the first time, and finding a balance between academics and extracurricular activities.

Students were most worried about the academic difficulty and workload (38% of respondents). Other concerns were the inability to keep up with peers (6%) and lack of academic preparation (6%).
“I worry that I will not be able to handle the work. I will try my absolute hardest, like I always have, to the best I can. I just worry that in this new, challenging environment, my best may not be enough.”

“The high workload will cut into and crush my passion.”

“Not being able to give my best for every assignment because my time and effort is divided over too great a workload.”

“That I’m not as smart as my awe-inspiring peers. I have feelings of intellectual inadequacy sometimes, thinking I’m nowhere near as smart, witty, funny, or accomplished as other admits, and that they’ll find out as soon as I open my mouth.”

“Failing classes really scares me. Getting terrible grades and being unable to get into grad school scares me. Being unable to understand things scares me. Being the dumbest person on campus seems like a painfully possible reality.”

In addition to academic concerns, students’ social concerns revolved around making friends (12% or respondents) and being away from home, family and friends (11%)

“The potential lack of social atmosphere that is visible at many other schools.”

“I am not confident of my abilities in social situations. I am slightly worried that I will have difficulty making friends.”

“Moving away from all of my friends and family; making new friends who will be as close as my high school friends; staying in touch with my family and friends”

Other common concerns centered around time management (8% of respondents), finding a balance between academics and extracurricular activities (7%) and feeling overwhelmed (5%).

“Managing my time and staying healthy.”

“I am worried that I won’t put the time in that I should for each part of my day, most especially work, but also the people I meet and activities I undertake.”

“I am worried about the stress and exhaustion of trying to balance two lifelong dreams: studying at MIT and training in the sport which I love.”
“I'm worried about all of the work, and being overwhelmed. I'm apprehensive to put myself in an environment where I know I will struggle, and even my best efforts will not pay off in the same way as they did in high school.”

Respondents were also concerned about being unable to take advantage of every opportunity (5%), getting enough sleep (3%), figuring out a major or career path (3%), and paying for tuition (3%). The wide range of responses included cold weather, transitioning to college, living with a roommate, and not being able to stand out.

“Balancing all my activities and the fact that MIT offers so many opportunities that I won't have time for.”

“being too unsure of myself to take advantage of certain opportunities”

“Payment - my parents can't afford to send me here, and I have no idea how this money is going to be payed =/ “

“Not being able to stand out :(“