The U.S. is fast becoming the destination of choice for an increasing number of foreign undergraduate students. International student enrollment in stateside universities has increased by 42% over the past five years, soaring from 784,481 international students in 2011 to 1.1 million in 2016, according to the recent SEVIS by the Numbers report by U.S. Immigration and Customs Enforcement.

But these huge numbers tell...
an even larger, more pragmatic story: The majority of international students studying here are opting for programs that concentrate in science, technology, engineering and mathematics. Nearly 40% of all international students are enrolled in STEM programs. And an even closer inspection shows that Asian students are by far the dominant player. Eighty-seven percent of all STEM students are from Asia, mostly from India and China: 81% of all Indian students and 40% of all Chinese students are enrolled in U.S. STEM programs.
That Asian students find themselves outnumbering their internationals peers is emblematic of a larger drama blending economics and culture, according to José Pérez, a partner at the Houston, TX-based Foster LLP, one of the nation’s largest immigration law firms. “If you are a middle class student from a developing country coming to pursue an education in the United States, your priority will be to pursue degrees that are productive from the get-go,” says Pérez. For as long as STEM subjects continue to be the backbone of the new global economy, they are the natural choice for a majority of foreign students, he says.
12 Best STEM Schools For International Students

1. Columbia University

2. Massachusetts Institute of Technology

3. Princeton University

Recommended by Forbes

4. University of Tulsa

5. Carnegie Mellon University

6. Harvey Mudd College

7. California Institute of Technology

8. University of Rochester

9. Stanford University

Photos: The 20 Top-Paying STEM Jobs For Recent College Graduates
“Degrees like economics or any other social science requires internships with leading companies and strong networking skills in order to be successful, whereas disciplines like engineering give you a special concrete skill set that not everyone else has,” says Ellen Liao, a University of Rochester freshman who grew up in Guangzhou, China, and moved to Vestavia Hills, Ala., at the age of 17. Liao, who is pursuing a chemical engineering degree, adds that she substituted her initial choice of majoring in economics with engineering. It promised a “more stable future.”

All international students need a visa to study in the U.S. If they wish to stay on
in the U.S. after graduation, they have to apply for an Optional Practical Training (OPT) work authorization, which allows them to stay and work in an area related to their college major for 12 months. To extend their stay beyond that period, students need to secure a job with an employer willing to sponsor an H-1B work visa.

John Skrentny, director of the Center for Comparative Immigration Studies at University of California, San Diego, suggests that a 2008 amendment in the Optical Practical Training (OPT) rule offering an additional 17 months to students pursuing STEM programs could be one of the motivations for foreign students to lean towards STEM programs. The grace period for STEM grads was further extended from 17 months to two years in May 2016.

However, Avalyn Langemeier, also a partner at Foster LLP, disagrees. “I
doubt international students who pay so much money for a college education here would base their career choice principally on whether they can get extended OPT time,” she says, pointing out that an H-1B petition has about a 33% possibility of getting selected in the lottery, regardless of whether the foreign worker has a STEM bachelor’s degree. “I believe they are more likely to choose their major and their career choice, like many students, based on what they like to do, what they do well, and where they believe they can find productive employment.”

Because many, if not most, foreign students are not fully fluent in English, language is a huge factor in choice of courses and degrees. Skrentny explains that STEM fields where language is not a primary requirement
are much more attractive for international students.

“Math is math, whether you do it in English or Spanish or Urdu – it is a technical skill,” says Pérez.

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Cultural factors such as parents’ attitudes towards the liberal arts versus a future in medicine or engineering also factors into the choices foreign students end up making. According to Liao, the “Asian parent stereotype” carries an element of truth, as parents often use job security and future stability to sway children away from the humanities or social sciences. In addition, the pressure on boys is normally more extreme than that on girls, Liao says, since men are traditionally expected to provide for the entire family.
And then there’s the so-called alien advantage. It is often far harder for students in countries like China and India to get into top STEM schools at home than it is to find a spot at an American university, says Skrentny.

But for some like Andy Liu, a junior at the University of Rochester, it is simply the lure of the American lifestyle that brought him thousands of miles from his hometown in Shenyang, China. “I love the diversity here and the chance to experience other cultures,” he says. “My only regret is that I wish I had come here sooner and worked on my English.”

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