International STEM PhD Applicants: A Worrying Decline

This Decline in International Students Negatively Affects our Economic & National Security

• In 2012, the President’s Council of Advisors on Science and Technology noted that there is a need for “...approximately 1 million more STEM professionals than the U.S. will produce at the current rate over the next decade if the country is to retain its historical preeminence in science and technology.”

• Immigrants were founders of 18% of all Fortune 500 companies, including:
  • The founders of more than 20 U.S. startups valued at least at $1 billion first came to the U.S. as international students, including:
  • Attracting highly skilled foreign STEM students to study and then work in the U.S. – complementing our home-grown STEM talent – significantly bolsters our national security. America must develop national security innovations stateside, including advances in quantum technology, nuclear detection, and cybersecurity, rather than having them be developed abroad, which forces the Department of Defense to purchase essential equipment from our competitors.

International Applications to U.S.-Based STEM Programs are Declining

• In 2017, there was a sharp drop in the number of enrollments of international graduate students in STEM fields. In 2018, a survey of 49 of the largest physics PhD programs at U.S. institutions found that there was a nearly 12% decline in international applications between 2017 and 2018.

• These declining applications along with other proposed visa policy changes indicate that STEM enrollments are likely to continue to drop.

Dual Intent F-1 Visas Help Solve the Problem

• Under the current Immigration and Nationality Act, the F-1 is a non-immigrant visa that requires that students prove they are only in the U.S. on a temporary basis and have no intention to stay after they graduate. By contrast, dual intent visas (such as K, L and O visas) allow holders to have legal intent to immigrate.

• With competition for the top international students increasing, legislation making F-1 visas dual intent – allowing international students to declare their intent to pursue careers in America post-graduation – would help attract the best and brightest students to U.S. universities and encourage them to become Americans and contribute to our economy.