

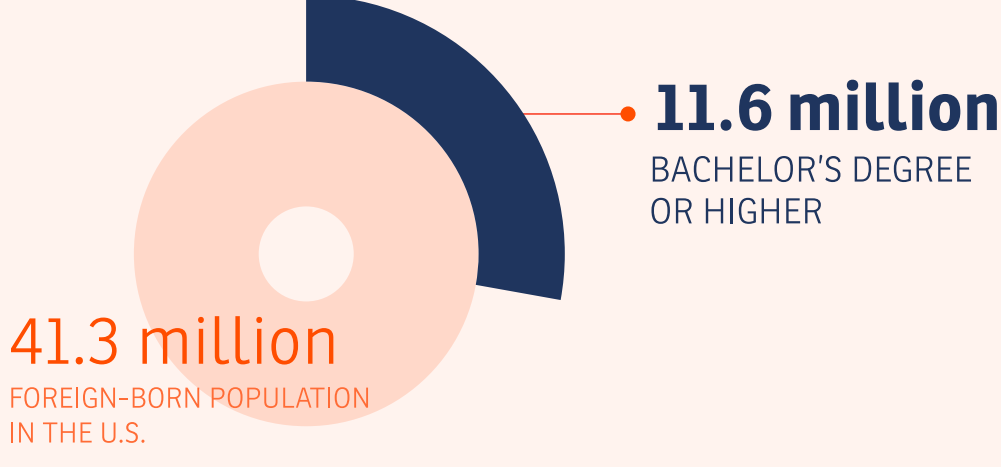
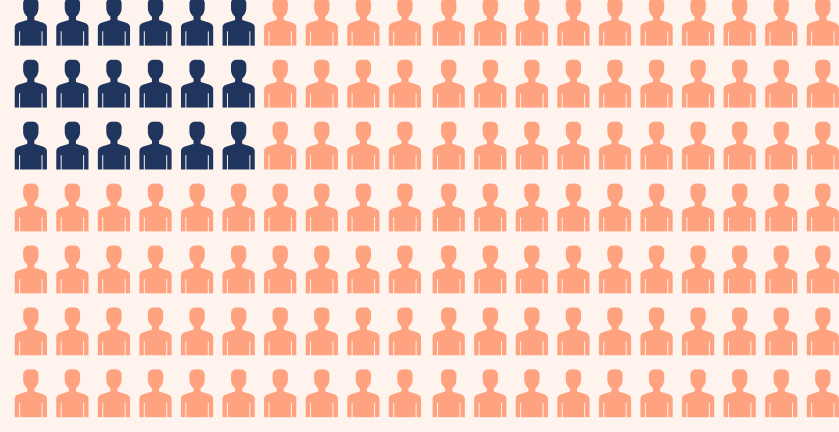
# PhDs and Patents

Foreign-born scientists play an important role in American innovation. This can be seen in the high percentages of immigrants working in science, technology, engineering, and mathematics (STEM) fields; in the number of foreign-born students enrolled in higher education; and in their representation on patents.

The foreign-born population has been increasing as a percentage of the total population since the 1970s.

**Currently, immigrants make up 13% of the total U.S. population.**

= 2.27 million | total U.S. population: 318.9 million



Compared with 29% of the native-born population,

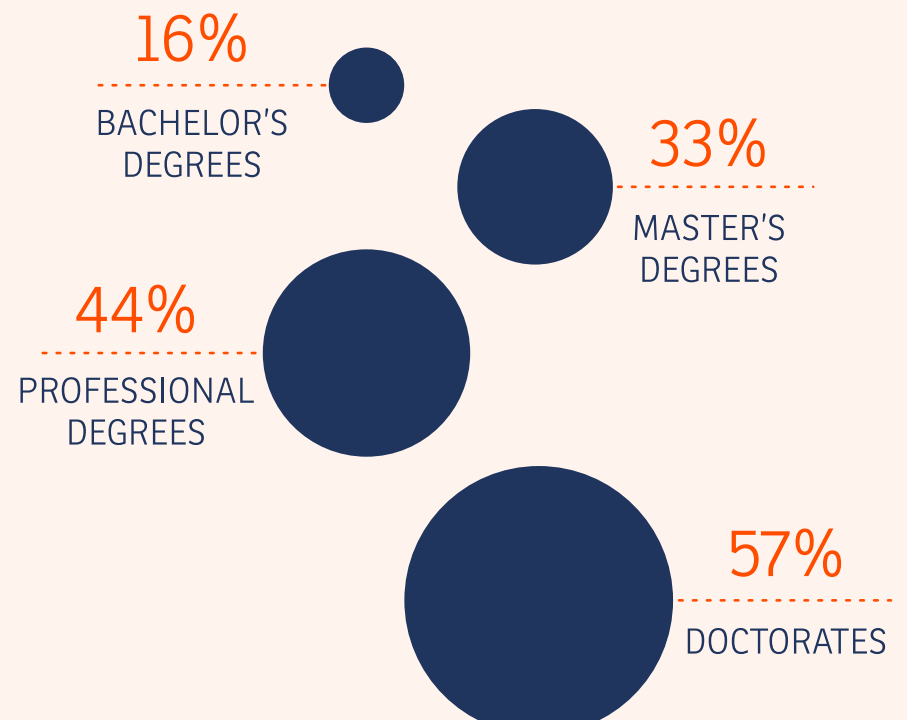
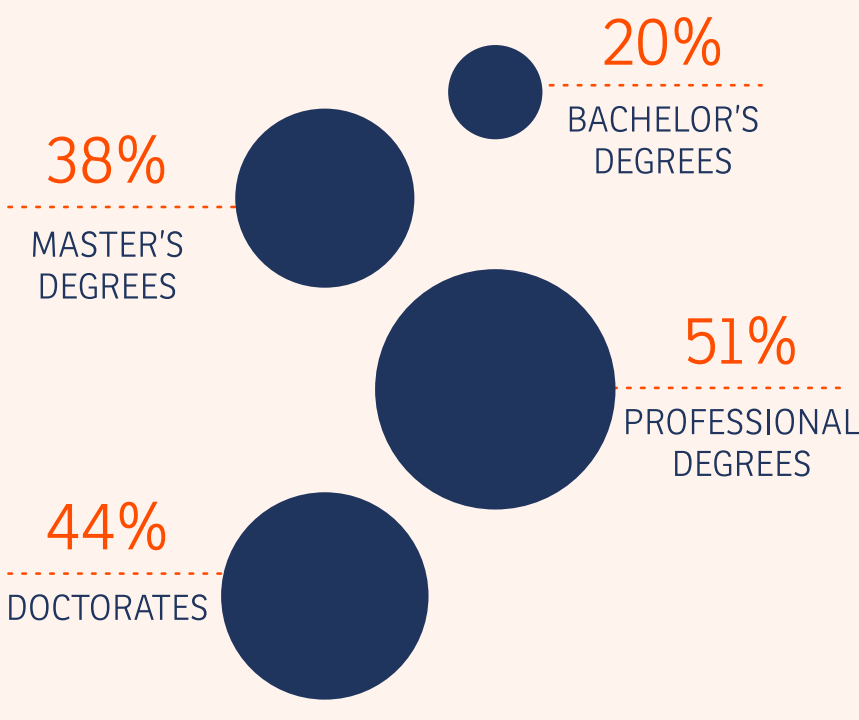
**28% of the foreign-born population holds a bachelor's degree or higher.\***

\* For population 25 years and older.

**In 2010, almost one-third of all science-degree holders and a quarter of all engineering-degree holders living in the United States were foreign-born.**

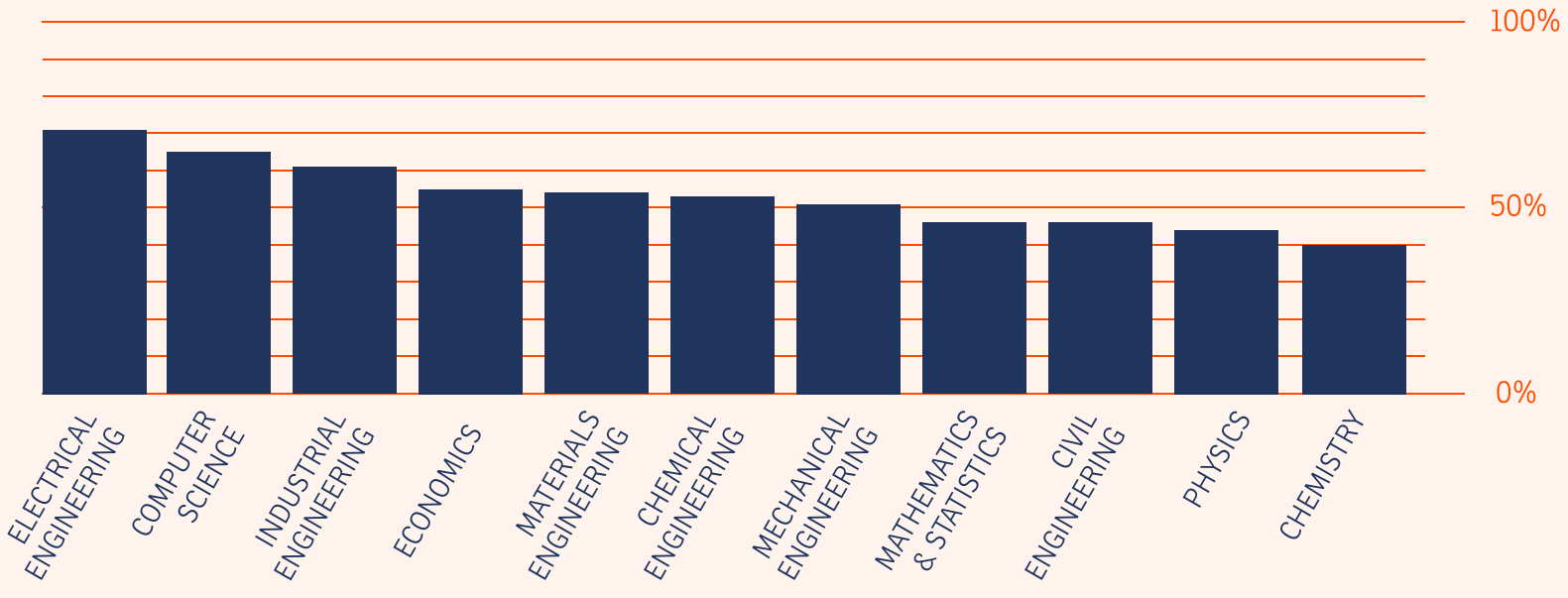
**29%**  
all sciences\*

**24%**  
engineering\*



\* Percentages of degree holders in these categories living in the United States who were foreign-born.

**In 2011, international students made up a large proportion of enrolled full-time students in graduate STEM programs.**

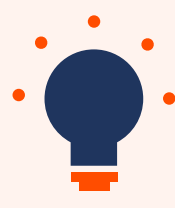
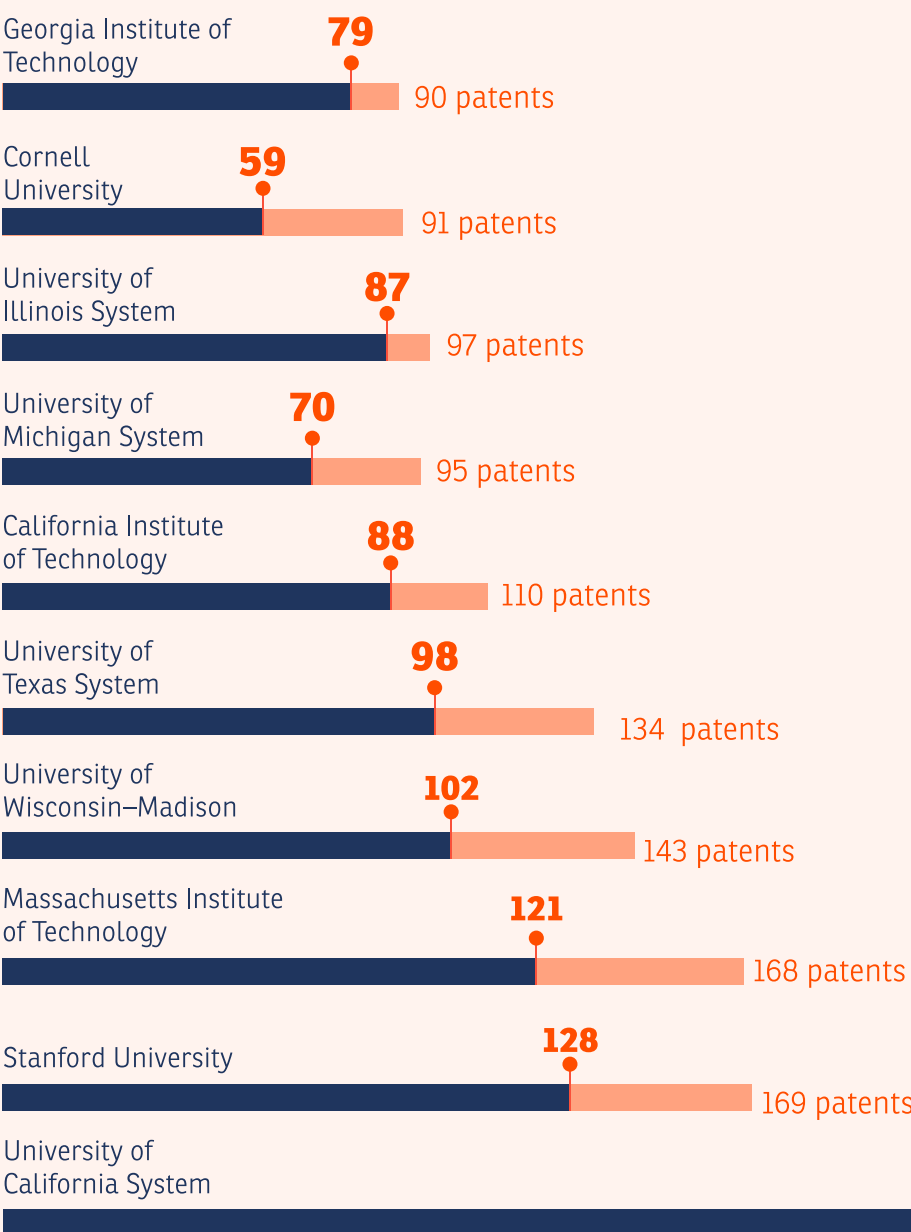
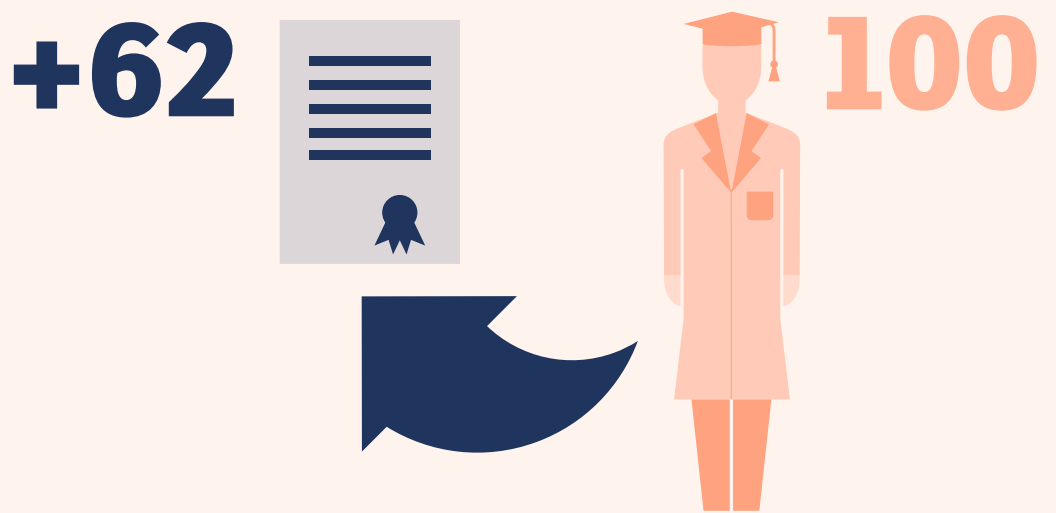


**2.62 jobs**

**On average, 2.62 jobs are created for every foreign-born graduate with an advanced degree from a U.S. university who stays to work in a STEM field**

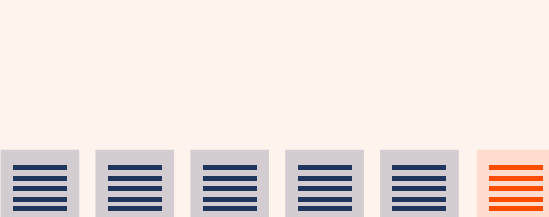
often because they help lead in innovation, research, and development.

**The nation gains 62 patent applications for every 100 international students who receive science or engineering PhDs from American universities.**



**The majority of patents at America's top 10 patent-producing universities listed at least one foreign-born inventor in 2011.**

**At our country's top research institutions in 2011, foreign-born researchers were listed as inventors on...**



**...more than 5 out of 6 information technology patents**



**...almost 8 out of 10 patents for pharmaceutical drugs or drug compounds**



**...and 3 out of 4 patents in microbiology and biology fields.**

SOURCES: MIGRATION POLICY INSTITUTE (2015) | AMERICAN COMMUNITY SURVEY (2013) | THE WHITE HOUSE (2013) | NATIONAL FOUNDATION FOR AMERICAN POLICY (2014, 2011) | PARTNERSHIP FOR A NEW AMERICAN ECONOMY (2012) | INFORMATION TECHNOLOGY INDUSTRY COUNCIL (2012) | U.S. CHAMBER OF COMMERCE (2012) | FOR FULL CITATIONS, VISIT VILCEK.ORG OR EMAIL INFO@VILCEK.ORG.