

166,000 Arizona STEM* Jobs to fill for 2018

*STEM =

Science

Biology, Chemistry, Marine Biology, Physics, Science

Technology

Computer / Information Systems, Game Design, Developer, Web / Software Developer

Engineering

Chemical, Civil, Computer, Electrical / Electronics, Photonics, General & Mechanical Engineering

Mathematics & Statistics

166,000 = the number of STEM-related jobs Arizona will need to fill by 2018.¹ Arizona kids and parents need to know about the potential for rewarding — and high paying careers in STEM. STEM professions and occupations are among the highest paying jobs.

They are also the basis for a successful, globally competitive and innovative Arizona and U.S. economy. During the next decade, overall U.S. demand for scientists and engineers is expected to increase at four times the rate for all other occupations.

- Between 2008 and 2018, new jobs in Arizona requiring postsecondary education and training will grow by 227,000 while jobs for high school graduates and dropouts will grow by 88,000.
- Between 2008 and 2018, Arizona will create 907,000 job vacancies both from new jobs and from job openings due to retirement.
- 554,000 of these job vacancies will be for those with postsecondary credentials, 231,000 for high school graduates and 123,000 for high school dropouts.
- Arizona ranks 37th in terms of the proportion of its 2018 jobs that will require a Bachelor's degree, and is 5th in jobs for high school dropouts.

Change in Arizona Jobs by Education Level: 2008 and 2018

Educational Level	2008 Jobs	2018 Jobs	Difference
High School Dropouts	399,000	423,000	24,000
High School Graduates	733,000	797,000	64,000
Postsecondary	1,683,000	1,910,000	227,000

1. **Source of data:** Anthony Carnevale, Nicole Smith & Jeff Strohl, Georgetown University Center on Education and the Workforce publication *Help Wanted: Projections of Jobs and Education Requirements Through 2018*. June 2010. See www.cewgeorgetown.edu

Where will Arizona's STEM Jobs be in 2018 by Occupation & Educational Level? (in thousands of jobs)

		High School Dropouts	High School Graduates	Some College	Associate's Degree	Bachelor's Degree	Graduate Degree	Total
STEM Jobs	Computer & Mathematical Science	0	5	17	8	30	11	73
	Architects & Technicians	0	3	4	3	5	2	16
	Engineers & Technicians	0	3	7	6	24	12	52
	Life & Physical Scientists	0	2	2	1	5	4	13
	Social Scientists	0	0	1	0	4	6	12
								166,000





Arizona

ARIZONA

AZ vs. National:

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Arizona male high school student interest in STEM is increasing, but at a slower rate than the national male average.

American Indian female students in Arizona are significantly more interested in STEM than the national average, and this is growing with each class year.

Female students in Arizona are one-third more likely to say they are interested in Mechanical Engineering, compared to female students nationally.

23.6%
of High School Students in Arizona are Interested in STEM
Compared to 25.5% Nationally

Students in Arizona are more likely than students nationally to say they are interested in Energy Technology and Science majors and careers.

American Indian students in Arizona are 40% more likely to say they are interested in Civil Engineering, compared to American Indian students nationally.

Arizona male high school student interest in STEM is increasing, but at a slower rate than the national average.

Source: *Where are the STEM Students? Where are the STEM Jobs? 2012-2013*. My College Options® and STEMconnector®, 2013

Interest of Arizona High School Students by STEM Discipline

Discipline	National Average	Arizona Average	Arizona Male	Arizona Female
Science	9.4%	8.7%	8.0%	9.1%
Technology	5.8%	5.3%	10.5%	1.4%
Engineering	11.7%	11.1%	22.1%	3.1%
Mathematics	2.1%	1.6%	2.1%	1.4%

