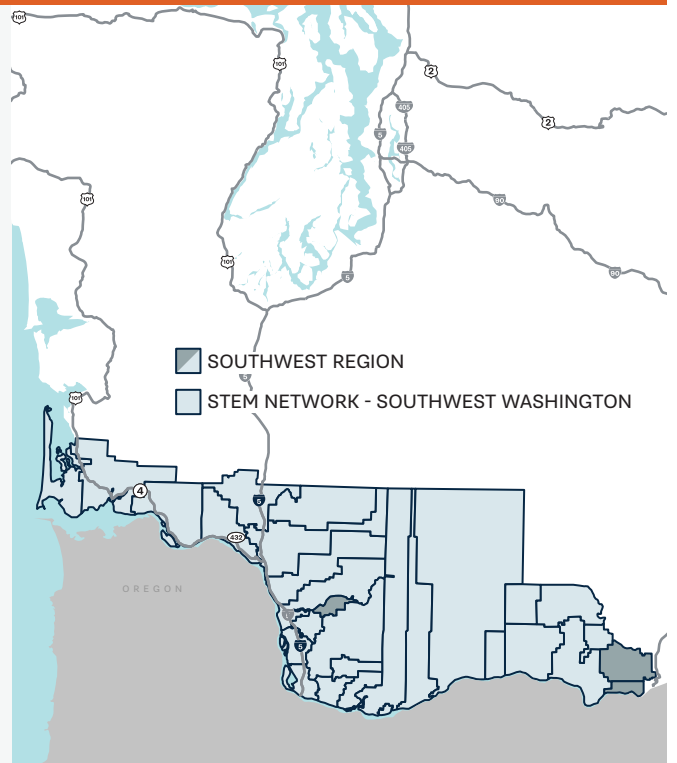




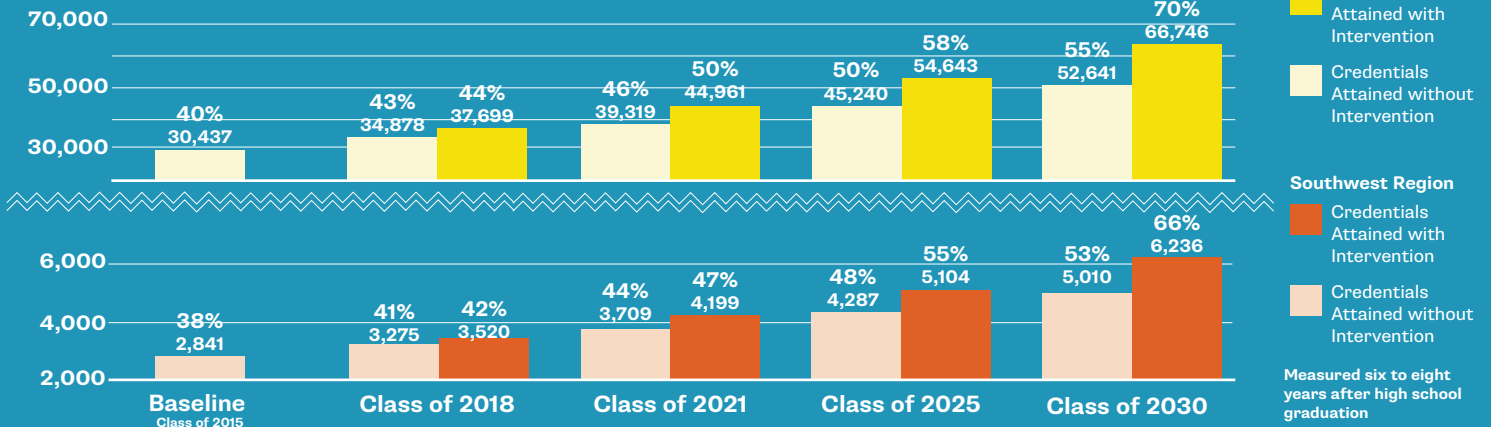
STEM BY THE NUMBERS: SOUTHWEST REGION

The Southwest Region is home to growing health-care, information technology, engineering, and advanced manufacturing industries, spanning from Long Beach to Vancouver. The region is made up of 29 school districts, 26 of which are members of the Southwest STEM Network. The Network's business, education, and community partners are working to close credential attainment gaps, especially for students of color and students from low-income families. They aim to increase the number of local students who become computer and electronic engineers, healthcare professionals, and manufacturing professionals, which have 2,095 annual projected openings combined over the next five years.

SOUTHWEST WASHINGTON
STEM NETWORK

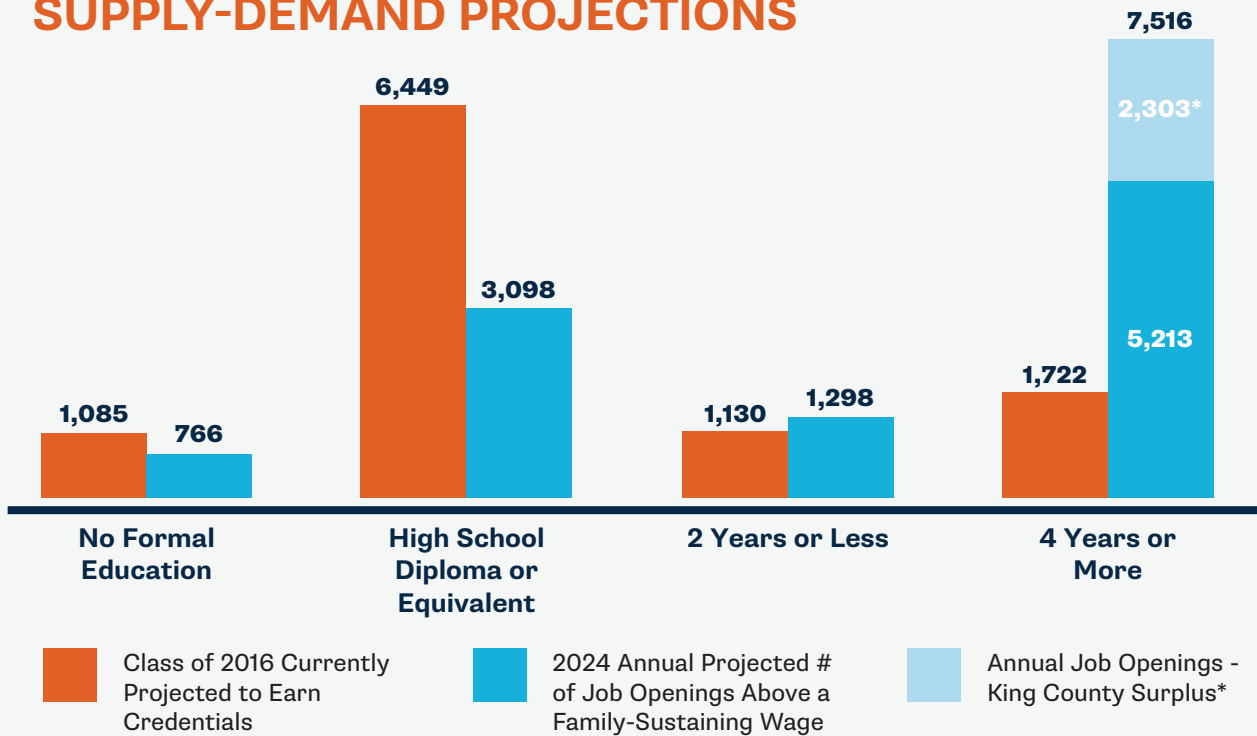


226 MORE CREDENTIALS PER YEAR = REGION ON TRACK



THE OPPORTUNITY: A STRONG DEMAND FOR STEM TALENT

SOUTHWEST REGION SUPPLY-DEMAND PROJECTIONS



By supporting more students to be on track to earn a high-demand credential, the Southwest Region will ensure that up to 10,375 available family-sustaining jobs (those that pay a regionalized wage of \$33,700 or more a year) could be filled by local young adults.

*Over the next 12 years, there will be a surplus of jobs in King County compared to the number of new, local, credentialed individuals in King County. That means that if other regions throughout the state only attended to their own regional job openings, King County would be sorely under-supplied by Washington state-originating kids. This surplus represents a proportion of the surplus jobs that could be supplied by students from the Southwest Region.

ADVANCED MANUFACTURING CAREER LAUNCH

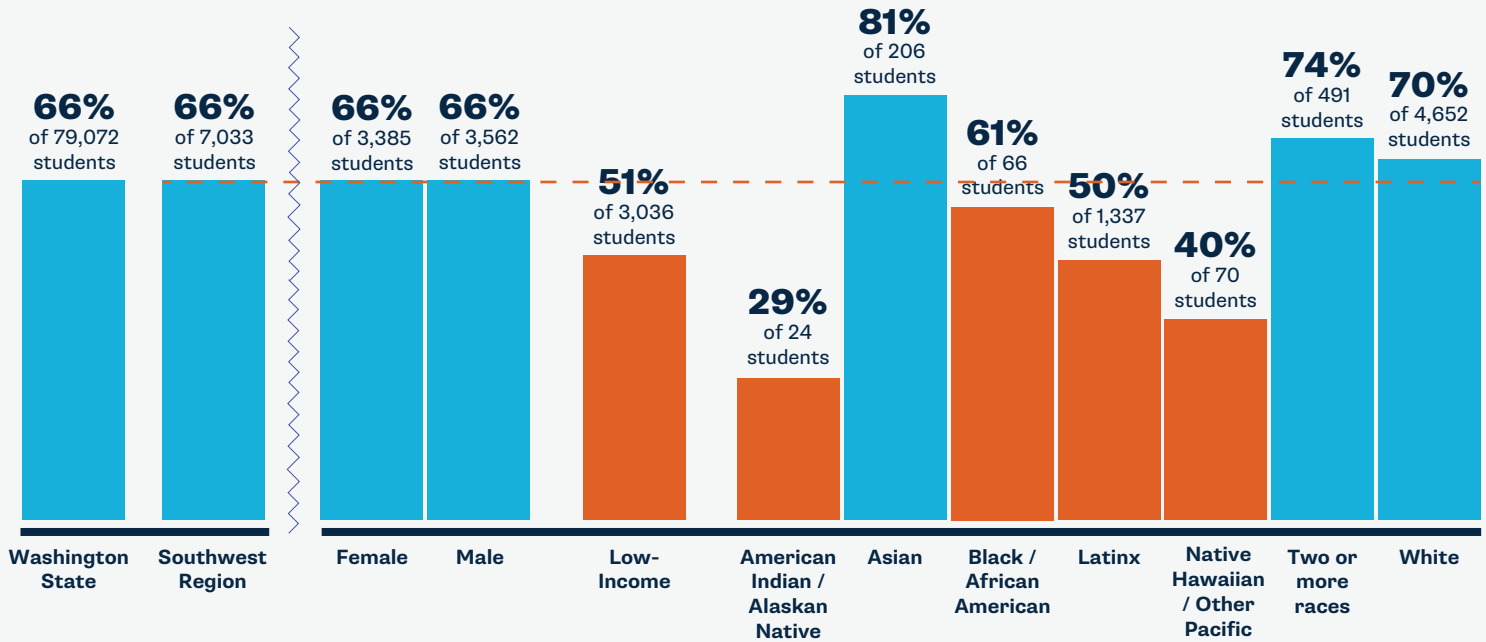
Southwest Washington is home to many high-tech companies that offer lucrative careers. Eighty percent of these jobs require a postsecondary certification, credential, or degree; however, only a third of local high school graduates are on-track to meet this demand. We bring together students who have a talent or an aptitude with business partners, such as SEH America, to provide on-site training and real job skills through the Advanced Manufacturing Career Launch. Students spend two years with pay in the program learning at the silicon wafer plant and at Clark College potentially earning their associate degree for free.



SOUTHWEST REGION K-12 STEM INDICATORS BY DEMOGRAPHIC

KINDERGARTEN MATH READY (2018)

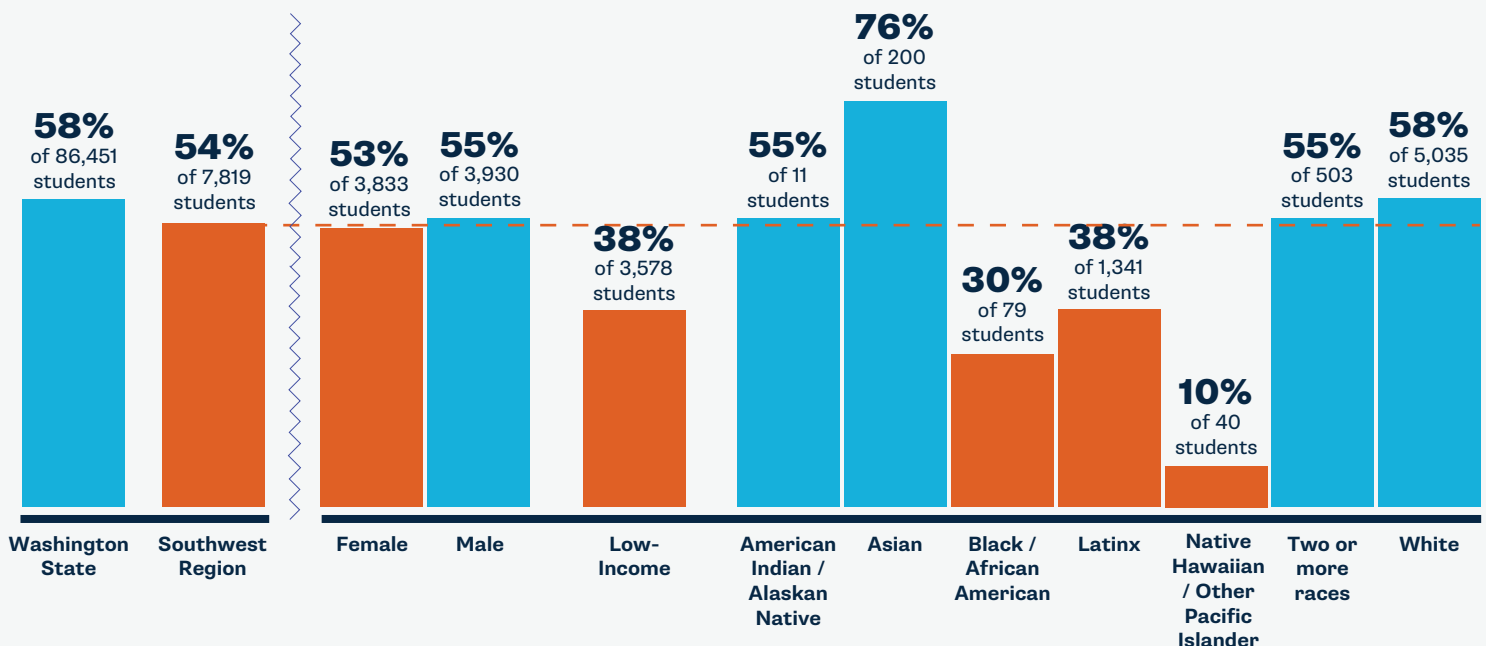
66% of 7,033 Southwest Region children entering kindergarten are math ready compared to **66% of 79,072** children statewide.



SOUTHWEST REGION INDICATORS BY DEMOGRAPHIC

3RD GRADE MATH (2017)

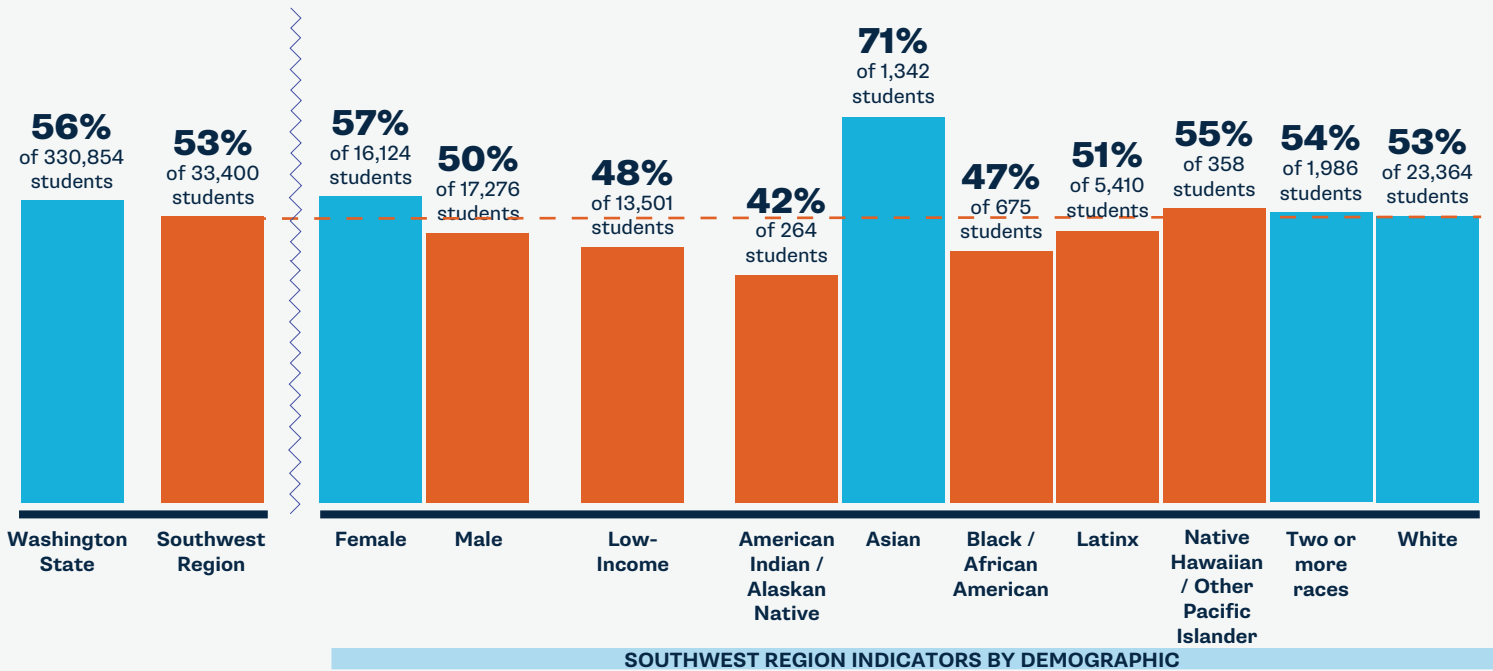
54% of 7,819 of Southwest Region third graders meet grade level math standards compared to **58% of 86,451** third graders statewide.



SOUTHWEST REGION INDICATORS BY DEMOGRAPHIC

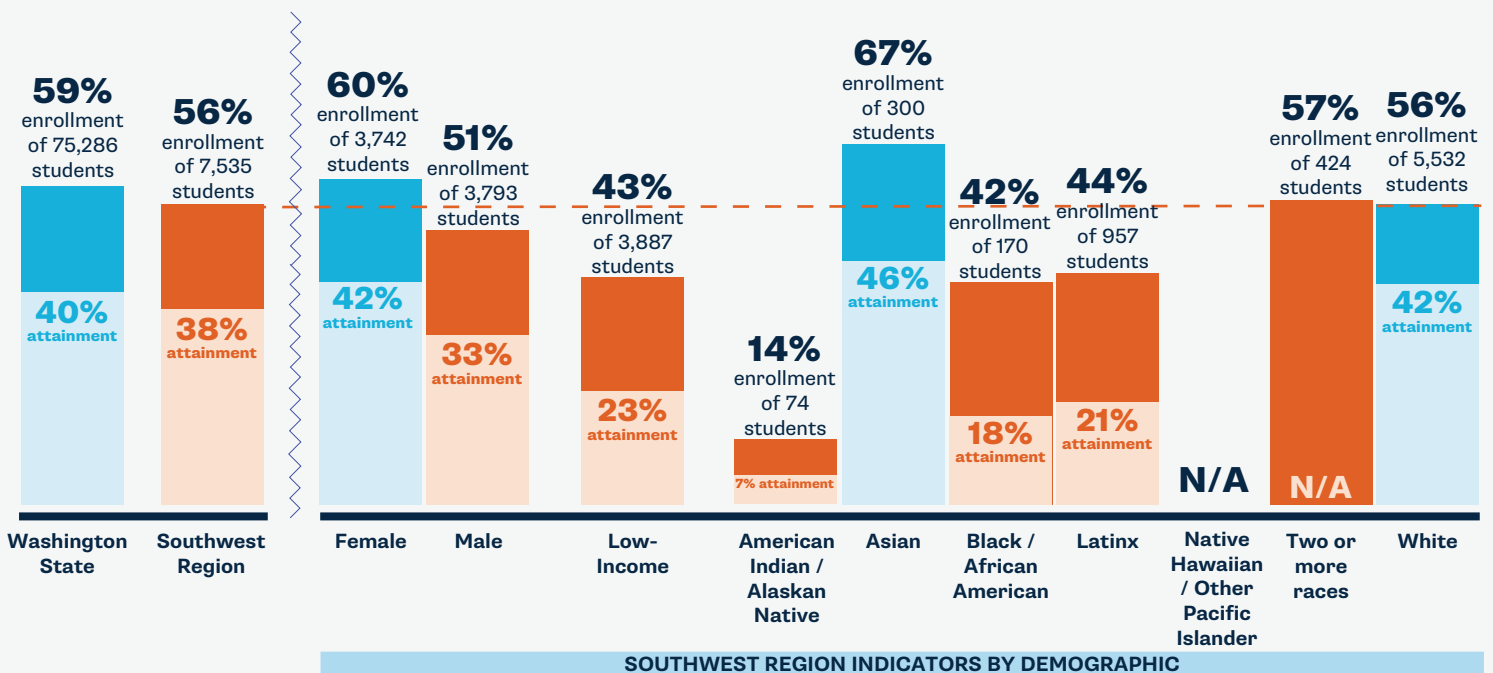
DUAL CREDIT (2017 9-12TH GRADERS)

53% of 33,400 Southwest Region high schoolers complete at least one dual credit course compared to 56% of 330,854 youth statewide.



CREDENTIAL ENROLLMENT/ATTAINMENT

56% of 7,535 of the originating ninth graders in the Southwest Region enroll in a postsecondary program and 38% of those originating ninth graders earn a credential by age 26.



Data citations and region-by-region analyses will be posted at www.washingtonstem.org/STEMbythenumbers.

For more information about early STEM and career pathways work in the Southwest Region, contact Southwest STEM Network co-directors Ted Feller, ted.feller@swstemnetwork.org, and Vickei Hrdina, vickei.hrdina@esd112.org.

SOUTHWEST REGION STEM INDICATORS

Ready for Kindergarten

While 66 percent of all Southwest Region kids are math ready by kindergarten, high-quality early learning opportunities need to be more accessible to families of color and those that are lower-income to close math-readiness gaps.

TBD we are determining availability of high-quality early learning for families and supports for professionals in this region

66% of Southwest Region children entering kindergarten are math ready

K-8 STEM Learning

Between kindergarten and third grade, math-readiness and skills gaps widen for many students, which is correlated with success in related areas of study. School districts need resources and assistance to remove barriers and create opportunities in STEM for all students.

TBD we are determining the STEM indicators for each school district in this region in partnership with LASER

54% of Southwest Region third graders meet grade level math standards

Secondary Pathways

While students in the Southwest Region are overall less likely to complete dual credit** courses than their peers across the state, students of color and low-income students experience reduced access to and completion of these courses compared to their peers.

TBD we are determining availability of dual credit courses and career pathways programs by type and subject area in this region

53% of Southwest Region high schoolers complete at least one dual credit course

**Dual credit programs give students the opportunity to earn high school and college credit simultaneously. Completion of dual credit coursework is highly correlated with higher education enrollment and completion.

Credential Enrollment/Attainment

Of the originating ninth graders across the state, 59 percent enroll and 40 percent complete a credential. While Southwest Region students enroll and complete at comparable rates, the region is working to expand credential pathways capacity to close opportunity gaps for key student groups.

TBD we are determining local higher education and career training program capacity in this region

56% of the originating ninth graders in the Southwest Region enroll in a postsecondary program and 43 percent of those originating ninth graders earn a credential by age 26.



STEM by the Numbers is a series of regional reports which examines data that tells us about Washington students' access to credentials and family-sustaining jobs. Together with our partners, we are advocating for and developing regionalized, cross-sector, and longitudinal data. We highlight student outcomes above, and in future publications we will report on systems indicators, like high school course offerings and availability of STEM professional learning and supports.

Data citations and region-by-region analyses will be posted at www.washingtonstem.org/STEMbythenumbers.

For more information about early STEM and career pathways work in the Southwest Region, contact Southwest STEM Network co-directors Ted Feller, ted.feller@swstemnetwork.org, and Vickei Hrdina, vickei.hrdina@esd112.org.

REGIONAL TOP INDUSTRIES AND STEM JOBS

MEDICAL ASSISTANTS

Annual # of Openings: 557
Credential: Certificate → Associate
Average Regional Wage: \$51,887

ENGINEERS

Annual # of Openings: 216
Credential: Bachelor's
Average Regional Wage: \$91,483

ADVANCED MANUFACTURING PROFESSIONALS

Annual # of Openings: 188
Credential: Certificate → Associate
Average Regional Wage: \$48,000

COMPUTER AND IT PROFESSIONALS

Annual # of Openings: 556
Credential: Certificate → Associate
Average Regional Wage: \$75,229

MATH ANYWHERE! AND FOR EVERYONE!

Math Anywhere! is a community-based project which aims to create opportunities for playful mathematics in everyday spaces. In collaboration with businesses, we develop place-based prompts to inspire math thinking and invite conversation as families interact with every days tasks – shopping, going to the movies, or going to the doctor. Engaging in mathematical moments outside of the classroom can help children develop positive math identities and can help adults reshape negative relationships with mathematics. Our initial work has brought math prompts to the library, restaurants, and the movie screen. Our continued efforts are designed to expand current notions about what it means to do math, where and when we can engage in math, and who is considered math capable.



By 2030, Washington STEM and our statewide partners aim to **triple the number of students** of color, students from low-income and rural families, and young women who are on track to earn high-demand credentials and enter family-sustaining careers in the state.

