

THE ECONOMIC VALUE OF ASHEVILLE-BUNCOMBE TECHNICAL COMMUNITY COLLEGE'S Engineering Technology Program



The Engineering Technology program¹ was established in 1964. In FY 2019-20, A-B Tech enrolled 141 students in the program. Of these students, 11 graduated with a certificate and 13 graduated with an associate degree in FY 2019-20.



THE WESTERN GATEWAY, NC

CAREER OUTLOOK

The Engineering Technology program can lead students into a number of occupations, which may include civil engineering technologists & technicians; electro-mechanical & mechatronics technologists & technicians; and environmental engineering technologists & technicians. Many of the Engineering Technology program students will enter the Western Gateway² workforce.

Using the regional number of annual job openings for these occupations (376) and subtracting the FY 2019-20 A-B Tech completers that may fill these openings (24), we arrive at a gap of 352 job openings.³ There are 1,107 unique job postings at the associate degree or below for these occupations in the Western Gateway. The top three posting companies are Dish Network; Triangle Apartment Association; and Jabil.

ALUMNI IMPACT

Former students of A-B Tech's Engineering Technology program added \$8.7 million in income to the Western Gateway economy in FY 2019-20. This figure represents the increased wages collected by former students active today in the regional workforce as a direct result of their education, the increased output of businesses that employ these students, and the multiplier effects that occur.

PROGRAM TO OCCUPATION MAPPING METRICS IN THE WESTERN GATEWAY

Number of occupations	31
Jobs (2020)	9,040
Projected avg. job growth (2020-2029)	+0.8%
Annual openings (2020)	376
Median annual wage (2020)*	\$45,875

* The median annual wage reflects all award levels.

ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings increase per completer

\$434.7 thousand

Total alumni impact in FY 2019-20

\$8.7 million

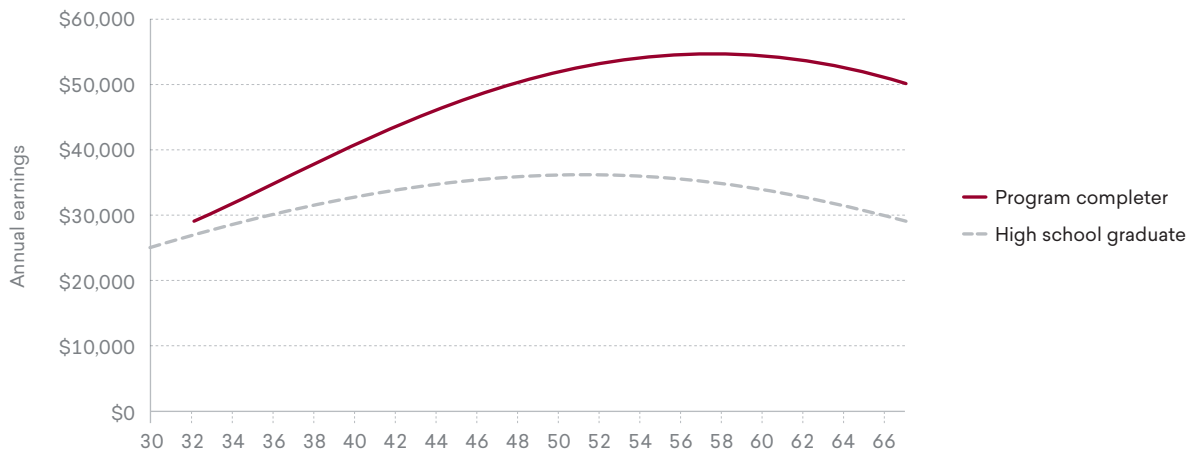


- 1 The Engineering Technology program is defined by the following Classification of Instructional Programs (CIP) codes: Civil Engineering Technology/Technician (15.0201), Electrical, Electronic & Communications Engineering Technology/Technician (15.0303), Environmental Engineering Technology/Environmental Technology (15.0507), Mechanical Engineering/Mechanical Technology/Technician (15.0805), and Computer Engineering Technology/Technician (15.1201).
- 2 For the purposes of this analysis, Western Gateway is defined as Buncombe, Haywood, Henderson, Madison, and McDowell Counties.
- 3 For the purposes of this analysis, only A-B Tech completers were considered when comparing to annual openings.

STUDENT RETURN ON INVESTMENT

To earn a degree or certificate in the program, students experience costs in the form of tuition and fees, books and supplies, and the opportunity cost of attending school instead of working. In return for this investment, students can earn higher wages. For every dollar students invest in their education in the program, they will receive \$4.40 back over the course of their working lives. This investment can also be seen in terms of a rate of return of 17.9%. This is an impressive return, especially when compared to the U.S. stock market 30-year average return of 10.6%.

LIFETIME EARNINGS OF A PROGRAM COMPLETER
COMPARED TO A HIGH SCHOOL GRADUATE



TAXPAYER BENEFITS

Taxpayers will receive an estimated present value of \$1.5 million in added tax revenue stemming from the students' higher lifetime earnings and the increased output of businesses. Savings to the public sector add another estimated \$95.6 thousand in benefits due to a reduced demand for government-funded social services in North Carolina. Throughout the students' working lives, North Carolina taxpayers will receive a total of \$1.6 million in benefits.

Throughout the students' working lives, **North Carolina taxpayers** gain in added tax revenue and public sector savings



\$1.6 million