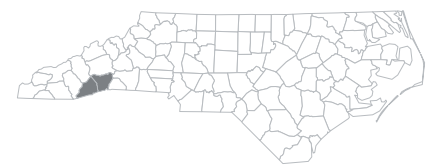


THE ECONOMIC VALUE OF BLUE RIDGE COMMUNITY COLLEGE'S Mechatronics Engineering Technology Program



The Mechatronics Engineering Technology program¹ was established in 2012. In FY 2019-20, Blue Ridge enrolled 90 students in the program. Of these students, 10 had an anticipated graduation date of May 2020 and 13 graduated with a certificate. The remaining students had graduation dates in the future.



BLUE RIDGE SERVICE AREA, NC

CAREER OUTLOOK

The Mechatronics Engineering Technology program can lead students into a number of occupations, which may include electro-mechanical & mechatronics technologists & technicians; mechanical engineering technologists & technicians; and mechanical drafters. Many of the Mechatronics Engineering Technology program students will enter the Blue Ridge Service Area² workforce.

Using the regional number of annual job openings for these occupations (43) and subtracting the FY 2019-20 Blue Ridge completers that may fill these openings (23), we arrive at a gap of 20 job openings.³ There are 56 unique job postings at the associate degree or below for these occupations in the Blue Ridge Service Area. The top three posting companies are Star Trax, Inc.; Baxter International, Inc.; and Sierra Nevada Brewing Co.

ALUMNI IMPACT

Former students of Blue Ridge's Mechatronics Engineering Technology program added \$202.4 thousand in income to the Blue Ridge Service Area economy in FY 2019-20. This figure represents the increased wages collected by former students

PROGRAM TO OCCUPATION MAPPING MEASURES IN THE BLUE RIDGE SERVICE AREA

Number of occupations	12
Jobs (2020)	906
Projected avg. Job growth (2020-2029)	+1.7%
Annual openings (2020)	43
Median annual wage (2020)*	\$47,237

* The median annual wage reflects all award levels.

ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings
increase per completer

\$367.0 thousand

Total alumni impact
in FY 2019-20

\$202.4 thousand



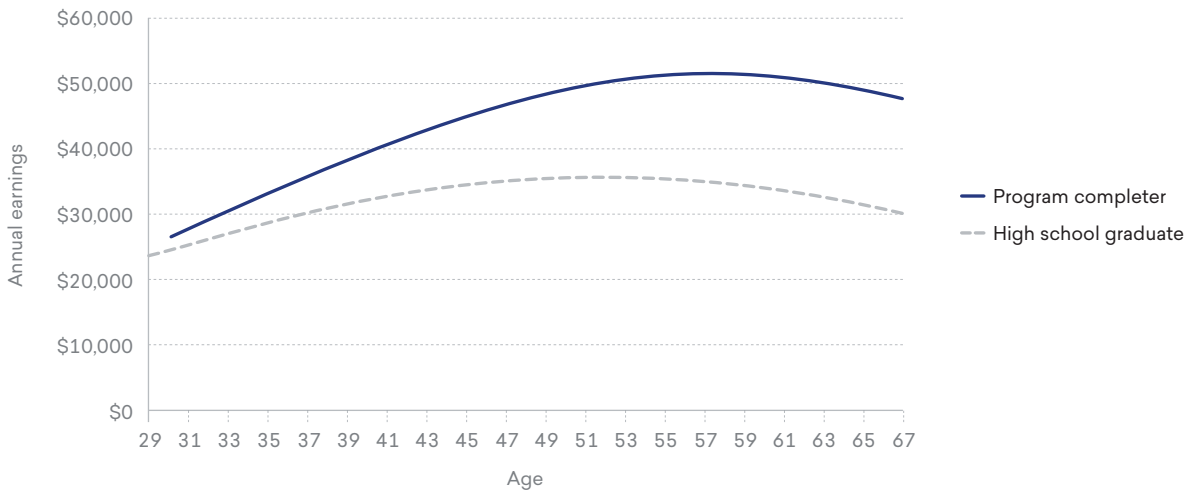
- 1 The Mechatronics Engineering Technology program is defined by the following Classification of Instructional Programs (CIP) codes: Mechatronics, Robotics, & Automation Engineering (14.4201), Robotics Technology/Technician (15.0405), Mechanical Engineering/Mechanical Technology/Technician (15.0805), and Automation Engineer Technology/Technician (15.0406).
- 2 For the purposes of this analysis, the Blue Ridge Service Area is defined as Henderson and Transylvania Counties.
- 3 For the purposes of this analysis, only Blue Ridge completers were considered when comparing to annual openings.

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.

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 \$5.40 back over the course of their working lives. This investment can also be seen in terms of a rate of return of 20.6%. 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 \$545 thousand 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 \$33 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 \$578 thousand in benefits.

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



\$578.0 thousand