



THE ECONOMIC VALUE OF MAYLAND COMMUNITY COLLEGE'S **Applied Engineering Technology Program**



The Applied Engineering Technology program¹ was recently established in 2015. In FY 2019-20, MCC enrolled 86 students in the program. Of these students, one graduated with a certificate and five graduated with an associate degree in FY 2019-20.



THE MCC SERVICE AREA, NC

CAREER OUTLOOK

The Applied Engineering Technology program can lead students into a number of occupations, which may include architectural & civil drafters; electrical & electronics drafters; and mechanical drafters. Many of the Applied Engineering Technology program students will enter the MCC Service Area² workforce.

Using the regional number of annual openings for these occupations (one) and subtracting the FY 2019-20 MCC completers that may fill these openings (six), we arrive at a surplus of five student completers.3 There are five unique job postings at the associate degree or below for these occupations in the MCC Service Area. The top three posting companies are Baxter International Inc.; Freelancer Technology Pty Limited; and Brushy Fork Environmental Cons.

ALUMNI IMPACT

Former students of MCC's Applied Engineering Technology program added \$22.7 thousand in income to the MCC Service Area 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 MEASURES IN THE MCC SERVICE AREA

Number of occupations	10
Jobs (2020)	23
Projected avg. job growth (2020-2029)	+1.9%
Annual openings (2020)	1
Median annual wage (2020)*	\$53,427

^{*} The median annual wage reflects all award levels.

ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings increase per completer

\$590.1 thousand

Total alumni impact in FY 2019-20



 $\mathsf{S}22.7$ thousand

The Applied Engineering Technology program is defined by the following Classification of Instructional Programs (CIP) code: Engineering Technology, General (15.0000).

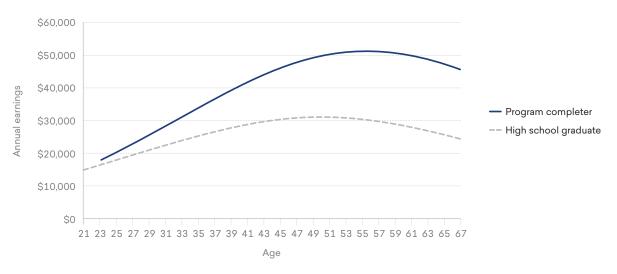
For the purposes of this analysis, the MCC Service Area is defined as Avery, Mitchell, and Yancey Counties.

³ For the purposes of this analysis, only MCC 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 \$13.50 back over the course of their working lives. This investment can also be seen in terms of a rate of return of 28.0%. 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 \$410.2 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 \$27.9 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 \$438.1 thousand in benefits.

Throughout the students' working lives, North Carolina taxpayers gain in added tax revenue and public sector savings \$438.1 thousand

