

# THE ECONOMIC VALUE OF JOHNSTON COMMUNITY COLLEGE'S Bioprocess Technology Program



*The Bioprocess Technology program<sup>1</sup> was only recently established in 2005. In FY 2019-20, JCC enrolled 63 students in the program. Of these students, two graduated with a certificate and 13 graduated with an associate degree in FY 2019-20.*



JOHNSTON COUNTY, NC

## CAREER OUTLOOK

The Bioprocess Technology program can lead students into a number of occupations, which may include industrial production managers; industrial engineers; and first-line supervisors of production & operating workers. Many of the Bioprocess Technology program students will enter the Johnston County workforce.

Using the county number of annual job openings for these occupations (160) and subtracting the FY 2019-20 JCC completers that may fill these openings (15), we arrive at a gap of 145 job openings.<sup>2</sup> There are 273 unique job postings at the associate degree or below for these occupations in Johnston County. The top three posting companies are Novo Nordisk A/S; Centene Corporation; and Grifols Biologicals, Inc.

## ALUMNI IMPACT

Former students of JCC's Bioprocess Technology program added \$734.9 thousand in income to the Johnston County economy in FY 2019-20. This figure represents the increased wages collected by former students active today in the county 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 JOHNSTON COUNTY

Number of occupations	17
Jobs (2020)	4,401
Projected avg. job growth (2020-2029)	+1.6%
Annual openings (2020)	160
Median annual wage (2020)*	\$69,586

\* The median annual wage reflects all award levels.

### ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings  
increase per completer

**\$605.2 thousand**

Total alumni impact  
in FY 2019-20

**\$734.9 thousand**



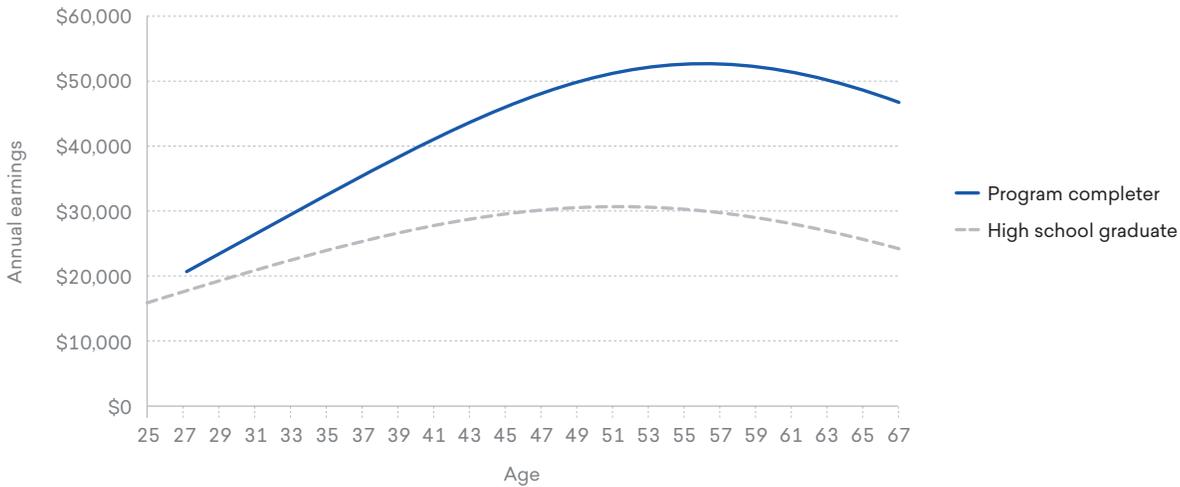
<sup>1</sup> The Bioprocess Technology program is defined by the following Classification of Instructional Programs (CIP) code: Manufacturing Technology/Technician (15.0613).

<sup>2</sup> For the purposes of this analysis, only JCC 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 \$9.20 back over the course of their working lives. This investment can also be seen in terms of a rate of return of 25.8%. 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 \$1.2 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 \$42.2 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 \$1.2 million in benefits.

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

**\$1.2 million**

