

# THE ECONOMIC VALUE OF CAPE FEAR COMMUNITY COLLEGE'S Industrial Engineering Trades Program



*The Industrial Engineering Trades program<sup>1</sup> was established in 1967. In FY 2019-20, CFCC enrolled 261 students in the program. Of these students, 57 graduated with a certificate and 40 graduated with an associate degree in FY 2019-20.*



THE CFCC SERVICE AREA, NC

## CAREER OUTLOOK

The Industrial Engineering Trades program can lead students into a number of occupations, which may include mechanical drafters; electrical & electronic engineering technologists & technicians; and electro-mechanical & mechatronics technologists & technicians. Many of the Industrial Engineering Trades program students will enter the CFCC Service Area<sup>2</sup> workforce.

Using the regional number of annual job openings for these occupations (43) and subtracting the FY 2019-20 CFCC completers that may fill these openings (97), we arrive at a surplus of 54 student completers.<sup>3</sup> There are 56 unique job postings at the associate degree or below for these occupations in the CFCC Service Area. The top three posting companies are Corning Incorporated; Delhaize America, LLC; and Alcamp, LLC.

## ALUMNI IMPACT

Former students of CFCC's Industrial Engineering Trades program added \$10.2 million in income to the CFCC 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 METRICS IN THE CFCC SERVICE AREA

Number of occupations	11
Jobs (2020)	1,195
Projected avg. job growth (2020-2029)	+0.9%
Annual openings (2020)	43
Median annual wage (2020)*	\$49,734

\* The median annual wage reflects all award levels.

### ALUMNI LIFETIME EARNINGS INCREASE AND IMPACT

Lifetime earnings  
increase per completer

**\$492.2 thousand**

Total alumni impact  
in FY 2019-20

**\$10.2 million**



<sup>1</sup> The Industrial Engineering Trades program is defined by the following Classification of Instructional Programs (CIP) codes: Mechanical Engineering/Mechanical Technology/Technician (15.0805), Chemical Technology/Technician (41.0301), Electrical, Electronic & Communications Engineering Technology/Technician (15.0303), and Mechatronics, Robotics, & Automation Engineering Technology/Technician (15.0407).

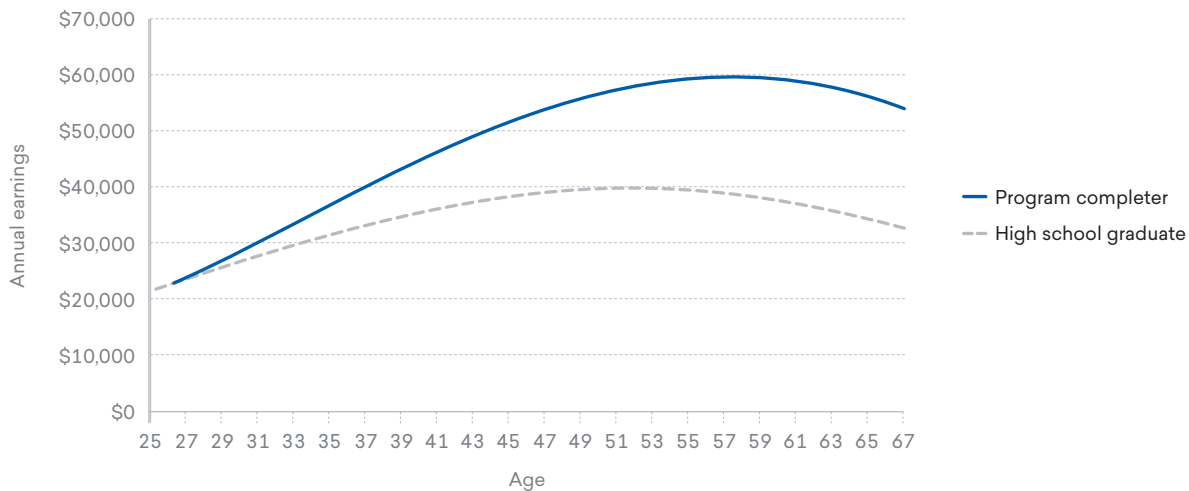
<sup>2</sup> For the purposes of this analysis, the CFCC Service Area is defined as New Hanover and Pender Counties.

<sup>3</sup> For the purposes of this analysis, only CFCC 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 \$6.80 back over the course of their working lives. This investment can also be seen in terms of a rate of return of 23.0%. 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



Source: Emsi Burning Glass impact model.

## TAXPAYER BENEFITS

Taxpayers will receive an estimated present value of \$4 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 \$184 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 \$4.2 million in benefits.

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



**\$4.2 million**