State Council of Higher Education for Virginia

New Economy Workforce Credential Grant Annual Report 2019

February 2020

Table of Contents

PURPOSE OF THIS REPORT

The purpose of this report is to provide an annual review of FY 2019 activities of the New Economy Workforce Credential Grant to the General Assembly and the Virginia Board for Workforce Development as outlined in § 23.1-627.7 of the Code of Virginia.

Summary of Findings for FY 2019

In FY 2019, the Virginia Community College System and the Southern Virginia Higher Education Center offered training aligned to high-demand occupations and fields as identified by the Virginia Board for Workforce Development. Observations from the training program's first year of implementation show that:

- Institutions offered training in eight high-demand occupational fields.
- Collectively, these institutions enrolled 7,150 students. Of those, 6,653 completed training and 4,839 reported a credential attained.
- The average student cost of the program was $672. The average state cost per credential attained was $1,606.
- Training completion rates averaged 94% and credential completion rates averaged 73%.
- The top 10 training programs accounted for more than 73% of credentials attained.
- Median earnings of student pre- and post-training completion increased in all occupational fields with the greatest median increases occurring in students earning less than $20,000 prior to enrollment.

During the 2016 session, the General Assembly passed HB 66 and SB 576, which established the New Economy Workforce Grant Program. This grant program, the first of its kind in the nation, provides a pay-for-performance model for funding noncredit workforce training that leads to a credential in a high-demand field. The program also includes requirements for students to complete the program in order to avoid paying additional costs. A summary of the major components of the program is included below. Additional information is available through the Code of Virginia.

Program Purpose

The Governor and the General Assembly outlined three primary purposes of program based on the requirements outlined in § 23.1-627.2. of the Code of Virginia:


The New Economy Workforce Credential Grant is established for the purpose of (i) creating and sustaining a demand-driven supply of credentialed workers for high-demand occupations in the Commonwealth by addressing and closing the gap between the skills needed by workers in the Commonwealth and the skills of the available workforce in the Commonwealth; (ii) expanding the affordability of workforce training and credentialing; and (iii) increasing the interest of current and future Virginia workers in technician, technologist, and trade-level positions to fill the available and emerging jobs in the Commonwealth that require less than a bachelor's degree but more than a high school diploma.

The program also defines two key elements:

- High-demand field: a "discipline or field in which there is a shortage of skilled workers to fill current job vacancies or anticipated additional job openings."
- Noncredit workforce credential: a "competency-based, industry-recognized, portable, and third-party-validated certification or occupational license in a high-demand field."

Program Requirements and Pay-for-Performance Model

The program focuses on a pay-for-performance model that provides payments for costs to institutions only when an individual completes training and when an individual completes a credential.

The following is a brief overview of the program requirements.

- Eligible institutions and type of training: Eligible institutions are community colleges, higher education centers and Richard Bland College. The type of training those institutions are required to offer is noncredit training.
- Funding:

Fiscal Year	Amount
2017	$5 million
2018	$7.5 million
2019	$9.5 million
2020	$13.5 million

- Alignment to high-demand fields: Training programs should align with the high-demand fields set by the Virginia Board for Workforce Development. Boards of eligible institutions are required to approve the aligned training programs.

- Payments and cost of the program: The student, the institution and the state, as described below, share the program's cost. In addition, the table below illustrates the pay-for-performance model.
    - Student responsibility: Students are required to pay one-third of the total cost of the program upon enrollment. Students may use third-party funds, such as noncredit financial aid, training vouchers or employer payment to cover this cost. If the student does not complete the program, then the student is required to pay an additional one-third of the cost of the program.
    - State: If the student completes the training, then the state provides one-third of the cost of the program, up to $1,500, to the institution. If the student earns and reports a credential, then the state pays an additional one-third of the cost of the program, up to $1,500.
    - Institution: If a student does not report a credential earned, then the institution does not receive state funding for one-third of the cost of the program.
- Reporting and payments: Eligible institutions must provide student-level data to SCHEV to receive funding.
- Administration: SCHEV is responsible for administering the program, conducting periodic assessments of the program, collecting student data and making final decisions on disputes between eligible institutions and grant recipients.

Program Pay-for-Performance Model

Payment Scenario if a student…	Student Pays ...	State Pays Training Institution...*
… Completed training and credential	1/3 program cost	2/3 program cost*
… Completed training but did not earn or report credential to the training institution	1/3 program cost	1/3 program cost*
… Did not complete training and did not earn or report a credential	2/3 program cost	No cost

- *Maximum contribution is $3,000 from the state.

HIGH-DEMAND FIELD AND TRAINING ALIGNMENT PROCESS

Identification of High-Demand Fields

The Code requires that the Virginia Board for Workforce Development identify high-demand occupational fields. In 2017, the Virginia Board for Workforce Development developed a methodology to identify high-demand programs, using the following criteria:

- The relevance of the occupational group to the state's economic development strategy as outlined in Governor McAuliffe's *New Virginia Economy* strategy document.
- Annual statewide job openings, based on Virginia Employment Commission/Bureau of Labor Statistics 10-year employment projections. Jobs were considered if they had more than 50 annual openings. (These levels were increased for FY 2019.)
- The degree to which the occupations require advanced skills as measured by entry-level education.

The board also allows a petition process for regions to request adding an occupational field to the list if the region can demonstrate sufficient demand. A complete list of training programs offered is on the *Virginia Career Works website*.

Based on a review of the occupations meeting the criteria above, the Virginia Board for Workforce Development identified high-demand occupations in 11 fields.

Training Programs Offered by Eligible Institutions

Once the Virginia Board for Workforce Development identifies the high-demand fields, the eligible institutions develop or align existing noncredit training programs to meet the new credential criteria and their boards approve the programs. To date, the Virginia Community College System and the Southern Virginia Higher Education Center are the only eligible training institutions offering programs in the high-demand fields.

The boards of the institutions submit their approved lists to the Virginia Board for Workforce Development. A full list of high-demand occupations and aligned training programs offered by eligible training institutions is maintained and updated on the Career Works website.

The following table is a sample list by occupational field of the types of training and credentials students could attain upon completion. A full list of credentials by type is in the Appendix.

Sample Workforce Training and Certifications Offered by Occupational Field

Occupational Field (Occupation Number)	Sample Workforce Training/Certification Offered
Computer and Mathematical (15)	CompTIA A+, Network+ and Server+ Computer Entry Level (CISCO Networking Technician and Associate, CompTIA IT Fundamentals); Information Systems Security Project Management Professional
Construction and Extraction (47)	Construction (Project Management, Carpentry, Contractor's License), Plumbing and Electrical, Highway Construction, Welding
Education, Training and Library (25)	Career Switcher/Teaching License
Healthcare Practitioners and Technical (29)	Emergency Medical, Pharmacy, EKG Technician
Healthcare Support (31)	Certified Nurse Aide, Medical Assistant, Medication Aide, Phlebotomy Technician
Installation, Maintenance and Repair (49)	Electrical and Electrical Systems, Engine Repair, HVAC, Power Line Worker
Office and Administrative Support (43)	Billing and Coding Specialist, Customer Services and Sales, Medical Administrative Assistant, Professional Coder, Society for Human Resource Management Certified Professional
Production (51)	Backflow Prevention, Electronics Assembly (JSTD-001 Certification), Machine Tool Operations, Manufacturing Technician 1 (MT1), Manufacturing Entry Level (specialist and production technician), Mechatronics, Six Sigma, Millwright (industrial machine installation, maintenance, troubleshooting and repair), Welding (flux, gas and general)
Transportation and Material Moving (53)	Commercial Driver's License, Logistics Associate, Logistics Technician, Remote Pilot Airman Certification

ENROLLMENT, TRAINING AND CREDENTIAL COMPLETIONS AND COSTS

The following section provides data for FY 2019 by occupational field, credential type and institution. FY 2019 data are based on all students completing a training course between July 1, 2017, and June 30, 2018. Eligible institutions are allowed up to 180 days after the completion of training to obtain verification that a student earned a credential. Training institutions may verify this information either through receiving information from a student or through a record match with the entity issuing the credential.

Training Offered in Eight High-Demand Occupational Fields

Construction, production, healthcare support and transportation had the highest number of completions. In FY 2019, FY 2019 data show that 7,150 individuals were enrolled in training and 4,839 attained a credential. The following table summarizes enrollments, completions and reported credentials, average costs to students, total payments by the state for training and credential completion, and average costs to the state per credential attained by occupational field.

FY 2019 Data on Enrollment, Training Completion and Reported Credentials by Occupational Field

Occupational Field	Enrolled	Completed Training	Reported a Credential Attained	Average Cost to Student*	Total State Payments for Training and Credential Completion*	Average State Payments per Credential Attained
Computer and Mathematical	643	593	195	$579	$449,504	$2,305
Construction and Extraction	1,798	1,701	1,465	$202	$652,904	$446
Healthcare Practitioners and Technical	268	242	125	$483	$171,638	$1,373
Healthcare Support	1,169	1,060	759	$813	$1,496,190	$1,971
Installation, Maintenance and Repair	643	608	476	$805	$925,847	$1,945
Office and Administrative Support	283	257	176	$747	$311,859	$1,772
Production	1,049	987	708	$611	$1,015,509	$1,434
Transportation and Material Moving	1,297	1,205	935	$1,268	$2,750,383	$2,942
All	7,150	6,653	4,839	$672	$7,773,833	$1,606

*Average costs per student are based on the charges of 1/3 of the cost of the program if the student completes training.
Total state payments do not equal the allocation for FY 2019 of $9.5 million due to how funds are obligated when a student enrolls. Payments are made at the time the training or credential completion are submitted to SCHEV.

The Average Student Cost of the Program was $672. The Average State Cost per Credential Attained was $1,606.

As shown in the table on the previous page, the average cost of the program to a student (reflecting 1/3 of the cost) was $672. SCHEV provided reimbursements to institutions through state general fund in the amount of $7.7 million for training completions and credentials. This figure is lower than the general fund appropriation for FY 2019 due to the pay-for-performance model where funds are obligated when a student enrolls, but are paid when an institution submits reimbursement upon completion of training and earning of a credential.

Based on the attainment data and the total payments through state general fund, the average state payment per credential attained in FY 2019 was $1,606 (total payments/credentials attained).

Top Training Programs and Alignment to Annual Job Openings

While many certifications are offered, more than 73% of enrollments occur in 10 program areas. They include commercial driver's licenses, training related to highway construction, welding and medical care, as shown in the table on the following page. The top 10 programs in FY 2018 also were in similar training areas.

In comparing enrollments in these programs to the annual job openings provided by the Virginia Employment Commission (VEC), the certifications appear to meet an annual need. For example, VEC projects annual openings for truck drivers to be about 5,235. In FY 2019, about 988 individuals enrolled in the credential program to attain a commercial driver's license. The difference between the annual openings and enrollments does not indicate a shortage, as training programs offered by private providers are not included in this analysis. Data for private training programs are not publicly available.

Top 10 Credentials and Annual Openings by Related Occupational Field

Certification (Occupation if different)	Annual Job Openings by Field*	Individuals* Enrolled FY 2019
Commercial Driver's License	5,235	988
Highway Construction (Highway maintenance workers and Paving, Surfacing & Tamping Operators)	687	661
Welding	874	351
Medical Assistant	1,992	450
Certified Nurse Aide (Nursing Assistant)	5,460	988
CompTIA A+ (Computer User Support/Help Desk Technician)	1,864	204
Phlebotomy Technician	551	199
Information Systems Security-CompTIA Security, Certified Professional and Ethical Hacker (Information Security Analysts)	1,427	117
Manufacturing Technician 1 (Machinists)	670	119
Pharmacy Technician	870	168

*Review based on Virginia Employment Commission long-term 2016-2026 projections. Differences may not represent a shortage as other individuals may complete certification through non-WCG programs.

*Enrollments figures can include individuals completing multiple credentials. The figures provided for individuals represents unduplicated count of the enrollments.

Training Completion Rates Averaged 94% and Credential Completion Rates Averaged 73%

While completion rates for training vary by field and credential type, the average completion for the last three years remains relatively stable. About 94% of enrolled individuals complete their training. Of those who complete their training, about 73% earn a credential. Some credential rates, such as IT certification, are much lower. This can occur when an individual receives the training but chooses not to become certified, as it is not always a requirement for work. A full list of completion rates by credential type is in the Appendix.

Average Completion Rates Based on FY 2017-FY 2019 Cohorts

Occupational Field	Training Completion Rate	Credential Completion Rate
Computer and Mathematical	95%	28%
Construction and Extraction	95%	87%
Healthcare Practitioners and Technical	90%	43%
Healthcare Support	92%	69%
Installation, Maintenance and Repair	94%	85%
Office and Administrative Support	92%	68%
Production	95%	74%
Transportation and Material Moving	94%	84%
All	94%	73%

Participation and Completion Rates by Institution

The number of students enrolling across training institutions varies. The table below provides enrollments and completions by institution. More than half (59%) of enrollments in FY 2019 were at institutions in rural areas of the state. The remaining enrollments occurred at urban institutions, including Germanna, Northern Virginia, Tidewater and Reynolds/Tyler community colleges.

FY 2019 Enrollment, Training Completion and Reported Credentials by Eligible Training Institution

Training Institution	Enrolled	Completed Training	Reported a Credential Attained
Blue Ridge CC	360	334	267
Central Virginia CC	214	203	128
Dabney Lancaster CC	173	130	104
Danville CC	73	73	32
Eastern Shore CC	38	34	18
Germanna CC	1,558	1,465	1,228
John Tyler/Reynolds CC (CCWA)	544	524	381
Lord Fairfax CC	416	385	363
Mountain Empire CC	88	85	76
New River CC	145	134	96
Northern Virginia CC	576	543	250
Patrick Henry CC	102	89	80
Paul D. Camp CC	290	274	221
Piedmont CC	464	434	254
Rappahannock CC	211	197	129
Southern Virginia Higher Ed Center	111	99	67
Southside Virginia CC	545	521	366
Southwest Virginia CC	120	112	71
Thomas Nelson CC	312	283	107
Tidewater CC	280	251	211
Virginia Highlands CC	126	120	81
Virginia Western CC	196	175	145
Wytheville CC	208	188	164

STUDENT DEMOGRAPHICS

The Workforce Credential Grant program tends to serve a nontraditional, older adult student whose average age is 35. More students are male, most likely because some of the largest enrollments occur in fields that are frequently majority male. For example, some of the largest enrollments are in commercial truck driving, welding, highway construction and machining.

Student Demographics by Sex and Race/Ethnicity

Student Demographics	Percentage
Sex	
Female	38%
Male	60%
Unknown	2%
Race/Ethnicity	
Asian	4%
Black/African-American	27%
Hispanic (non-White)	5%
Multi-race	2%
Unknown/unreported	15%
White (non-Hispanic)	47%

Based on enrollments of students through FY 2019.

EARNINGS OUTCOMES

When the General Assembly established the program in 2016, an important component was to align training to high-demand fields where there was an unmet need for workers. As a result, tracking earnings of those completing the program is an important measure. To assess these outcomes, SCHEV matched wages for a cohort of 4,330 students that completed a program between July 2016 and September 2017. These individuals' wages were matched through the Virginia Longitudinal Data System with Virginia Employment Commission (VEC) wage records. Of the 4,330 students, 410 had no wage match either prior to or after participation in the program. While the wage records provided through the VEC are comprehensive, some people are exempt from reporting. This can include individuals who are self-employed, work for the federal government or those who meet other exemption qualifications. Those individuals were removed from the analysis.

SCHEV staff then analyzed earnings pre-training, during program enrollment and post-completion of the remaining 3,952 students.

The following table provides the distribution of participants in the cohort by occupational field.

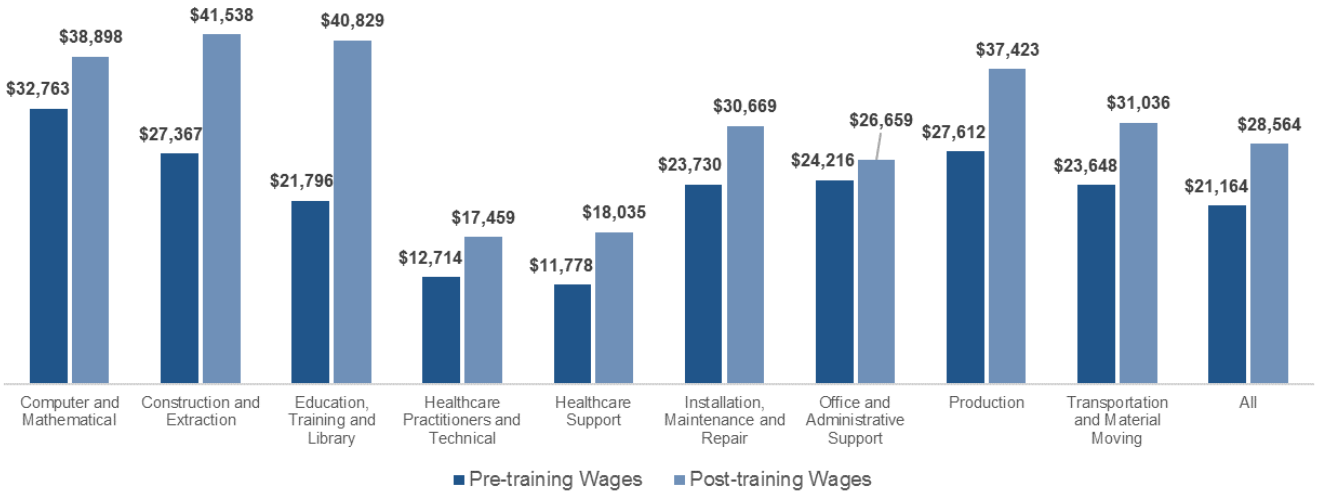
Profile of Cohort Used for Assessing Earnings Outcomes

Occupational Field	Completed Training Program and Credential	Completed Training, Not Credential	No Program Completion, Completed Credential	No Training Completion, No Credential	Total
Computer and Mathematical	104	346	.	9	459
Construction and Extraction	241	16	1	6	264
Education, Training and Library	98	.	.	11	109
Healthcare Practitioners and Technical	43	117	.	15	175
Healthcare Support	414	253	.	40	707
Installation, Maintenance and Repair	57	7	.	6	70
Office and Administrative Support (43)	172	55	1	8	236
Production	461	155	1	25	642
Transportation and Material Moving	1,056	173	3	58	1,290
Total	2,646	1,122	6	178	3,952

Median Wages Increased in all Occupational Fields

The chart below provides data for median wages one year prior to the student entering the program and median wages for one year after training completion. In all occupational fields, wages increased.

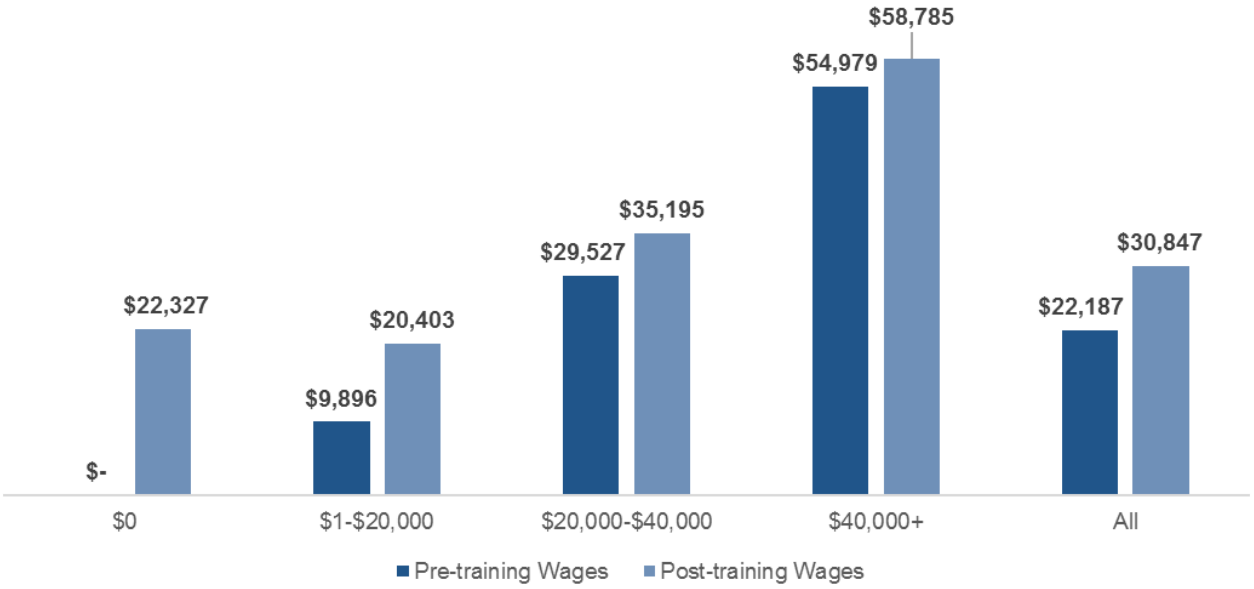
Median Wages Pre- and Post-Training Completion (all participants)



Wage Increase by Income Range

When reviewing pre- and post-completion data, the group with the largest earnings gain represented individuals with the lowest earnings upon entry who completed training and a credential. The table below shows the pre- and post-earnings by income group for individuals completing a credential.

Average Earnings Increase Pre- and Post-Completion by Income Group for Individuals Who Completed Training and a Credential



ADDITIONAL OBSERVATIONS AND NEXT STEPS

Since the inception of the Workforce Credential Grant in 2016, the program has continued to grow based on student demand. The largest areas of enrollment occur in occupational fields with annual job openings that exceed training completions. In addition, median earnings continue to grow post-training completion. While it does not appear that credentials produced by this program exceed demand, SCHEV staff plans to explore this topic more in the coming year as part of a Council focus on alignment of postsecondary training to workforce demand.

APPENDIX: FY 2019 TRAINING CREDENTIAL ENROLLMENT, COMPLETIONS AND COSTS

	Enrollments	Training Completions	Credential Completions	% Complete Training	% Complete Credential	Average Tuition	Sum of total reimbursed	Avg Reimbursed Per Credential Earned
Computer and Mathematical (15)	**643**	**593**	**195**	**92%**	**33%**	**$579**	**$449,504**	**$2,305**
CompTIA A+	223	205	45	92%	22%	$742	$184,693	$4,104
CompTIA Network+	135	127	33	94%	26%	$455	$71,932	$2,180
CompTIA Server+	24	23	12	96%	52%	$233	$8,167	$681
Computer Entry Level (CISCO Networking Technician and Associate, CompTIA IT Fundamentals)	48	41	15	85%	37%	$402	$22,057	$1,470
Customer Service and Sales Certifications	18	18	18	100%	100%	$196	$7,056	$392
Information Systems Security (CompTIA Security, Certified Professional and Ethical Hacker)	163	149	59	91%	40%	$597	$129,655	$2,198
Project Management Professional (PMP)	32	30	13	94%	43%	$630	$25,944	$1,996
Construction and Extraction (47)	**1,798**	**1,701**	**1,465**	**95%**	**86%**	**$202**	**$652,904**	**$446**
Construction (Project Management, Carpentry, Contractor's License)	32	31	13	97%	42%	$395	$23,132	$1,779
Construction Craft Laborer - Level 1	11	10	9	91%	90%	$755	$14,345	$1,594
Core - Introductory Craft Skills	190	182	158	96%	87%	$297	$100,411	$636
Heavy Equipment Operations	38	35	35	92%	100%	$916	$64,120	$1,832
Highway Construction	1,354	1,279	1,134	94%	89%	$127	$311,580	$275
HVAC (includes license renewal)	17	16	13	94%	81%	$425	$12,325	$948
Marine Trade Training	82	76	69	93%	91%	$558	$80,420	$1,166
Plumbing & Electrical (including license renewal)	74	72	34	97%	47%	$391	$46,570	$1,370
Healthcare Practitioners and Technical (29)	**268**	**242**	**125**	**90%**	**52%**	**$483**	**$171,638**	**$1,373**
Advanced Cardiovascular Life Support	12	11	11	92%	100%	$50	$1,100	$100
EKG Technician	14	14	12	100%	86%	$369	$9,582	$799
Emergency Medical Technician	69	61	42	88%	69%	$504	$52,612	$1,253
Pharmacy Technician	173	156	60	90%	38%	$514	$108,344	$1,806
Healthcare Support (31)	**1,169**	**1,060**	**759**	**91%**	**72%**	**$813**	**$1,496,190**	**$1,971**

Certified Nurse Aide (CNA)	403	373	206	93%	55%	$654	$374,992	$1,820
Medical Assistant	483	424	383	88%	90%	$1,059	$846,803	$2,211
Medication Aide	57	51	7	89%	14%	$361	$20,960	$2,994
Pediatric Advanced Life Support	5	5	5	100%	100%	$42	$417	$83
Phlebotomy Technician	221	207	158	94%	76%	$701	$253,018	$1,601
Installation, Maintenance, and Repair (49)	**643**	**608**	**476**	**95%**	**78%**	**$805**	**$925,847**	**$1,945**
Apartment Maintenance Technician	8	7	5	88%	71%	$700	$8,400	$1,680
Driveline/Hydraulics Certification	37	35	7	95%	20%	$427	$22,080	$3,154
Electrical and Electrical Systems	130	122	78	94%	64%	$491	$101,643	$1,303
Engine Repair	48	46	33	96%	72%	$163	$12,985	$393
Facilities Maintenance	1	1	0	100%	0%	$1,115	$1,115	-
HVAC (includes license renewal)	145	138	94	95%	68%	$509	$119,774	$1,274
Other (Driveline/Hydraulics and Workready Foundations CORE)	13	12	11	92%	92%	$225	$5,175	$470
Other (Driveline/Hydraulics, Diesel Engine, Workready Foundations CORE)	8	8	5	100%	63%	$275	$3,575	$715
Power Industry Fundamentals	109	102	106	94%	104%	$1,200	$249,600	$2,355
Power Line Worker	144	137	137	95%	100%	$1,466	$401,500	$2,931
Office and Administrative Support (43)	**283**	**257**	**176**	**91%**	**68%**	**$747**	**$311,859**	**$1,772**
Billing and Coding Specialist	130	113	78	87%	69%	$1,004	$192,348	$2,466
Customer Services and Sales	52	52	42	100%	81%	$320	$25,301	$602
Medical Administrative Assistant	25	22	20	88%	91%	$510	$20,446	$1,022
Professional Coder	47	42	28	89%	67%	$680	$48,924	$1,747
SHRM Certified Professional	29	28	8	97%	29%	$690	$24,840	$3,105
Production (51)	**1,049**	**987**	**708**	**94%**	**72%**	**$611**	**$1,015,509**	**$1,434**
Backflow Prevention	25	24	13	96%	54%	$240	$7,950	$612
Electronics Assembly (JSTD-001 Certification, IPC)	8	8	8	100%	100%	$179	$2,864	$358
Machining	179	173	136	97%	79%	$546	$170,050	$1,250
Manufacturing Entry Level (specialist and production technician)	14	14	12	100%	86%	$557	$14,500	$1,208
Manufacturing Technician 1 (MT1)	130	125	66	96%	53%	$765	$146,700	$2,223
Mechatronics (Siemens Certifications)	14	5	6	36%	120%	$1,286	$13,500	$2,250
Photovoltaic - Entry Level	50	46	26	92%	57%	$475	$34,200	$1,315

Six Sigma	54	53	24	98%	45%	$672	$51,467	$2,144
Welding	575	539	417	94%	77%	$609	$574,278	$1,377
Transportation and Material Moving (53)	**1,297**	**1,205**	**935**	**93%**	**78%**	**$1,268**	**$2,750,383**	**$2,942**
Commercial Driver's License A	1,107	1,020	834	92%	82%	$1,441	$2,675,319	$3,208
Commercial Driver's License B	3	3	0	100%	0%	$767	$2,300	-
Logistics Associate	47	45	37	96%	82%	$349	$28,500	$770
Logistics Technician	35	34	23	97%	68%	$451	$25,200	$1,096
Remote Pilot Airman Certification	105	103	41	98%	40%	$139	$19,064	$465
Total	**7,150**	**6,653**	**4,839**	**93%**	**73%**	**$672**	**$7,773,833**	**$1,606**