



Robotics Proposal

Manufacturing in Vermont

Vermont manufacturing is alive and well, with companies in every section of the state producing goods using state of the art machinery. According to www.thinkvermont.com:

- 36,000 employees are working for Vermont manufacturers
- Over 1,000 manufacturing firms are located throughout Vermont
- Manufacturing makes up 11.1% of Vermont's GDP
- \$1.7 billion in total wages were paid through Vermont Manufacturing in 2014
- Half of all Vermont counties have at least 25% of their manufacturing workforce employed in advanced sectors

Manufacturing jobs in Vermont lead to solid careers and strong wages. The average wage for a starting position in Manufacturing in Vermont is \$14.72, much higher than minimum wage. (Sourced from Indeed.com previous 36 months of job postings in manufacturing.)

If you compare all non-farm occupations in Vermont with manufacturing, the annual wage compensation rises from \$31,921 (all other occupations) to \$61,490 (manufacturing).

The Need for a Skilled Workforce

Vermont manufacturing has come a long way from its industrial roots. www.thinkvermont.com states: "...Vermont manufacturers use the most modern techniques and equipment to produce high-value-added items in the precision machining, plastics, composites, semiconductor, and medical device segments, to name just a few." This modern manufacturing requires a workforce skilled in technical areas, including robotics.

This proposal seeks funding to set up the Community College of Vermont to offer curriculum and training in robotics, which will include two national certifications: the Yaskawa Operator Certification, and the Yaskawa Programming Certification. The proposal also includes a tabletop educational robotic arm assembly to give students real-world experience in programming and operating the type of robotics arms they will see in industry. According to the Intelitek website: "The Intelitek Certified Robotics programs provide robotic learning to career technical education programs, offering curriculum and project-based activities to prepare students when working with real world industrial robots. Students who complete the Intelitek training curriculum with the Yaskawa Motoman robot can take a test and become Operator or Programmer Certified. This Yaskawa endorsed certification is highly revered in industry and can give a candidate a leg up when searching in the job market. Yaskawa is one of the leading robotics vendors in industry and the certification on the MHJF educational robot uses the same tools and programming pendant as the largest and most sophisticated industrial robots from Yaskawa."

(<https://www.intelitek.com/>)

Budget Narrative

| Description | Price |
|---|-----------------|
| LearnMate Learning Management System hosting and setup for up to 100 users | \$800 |
| Additional 3 years of hosting for 100 users | \$1,500 |
| Motoman Fundamentals Package; Standard Robotics Hardware Package + Shipping | \$38,330 |
| 15 hours of virtual lab/instruction in Fundamentals | \$2,995 |
| 15 hours of virtual/lab instruction in Advanced | \$2,495 |
| Yaskawa Operator Certification test Registration for first 10 users | \$1,000 |
| Yaskawa Programming Certification test Registration for first 10 users | \$1,000 |
| Professional Installation and Training for Staff/Faculty | \$1,900 |
| TOTAL REQUEST | \$50,020 |

A Career in Manufacturing is -- A Good Investment for your Future

Fall 2018

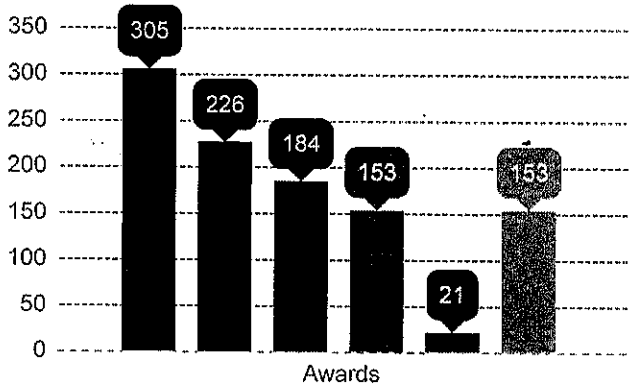


The Community College of Vermont awarded Manufacturing Skill Standards Council (MSSC) certificates to over 300 people between 2015-2018.*

These stackable credentials lead to a Certified Production Technician (CPT) award - an industry credential. Credentials like these can help you obtain an entry-level position in manufacturing.

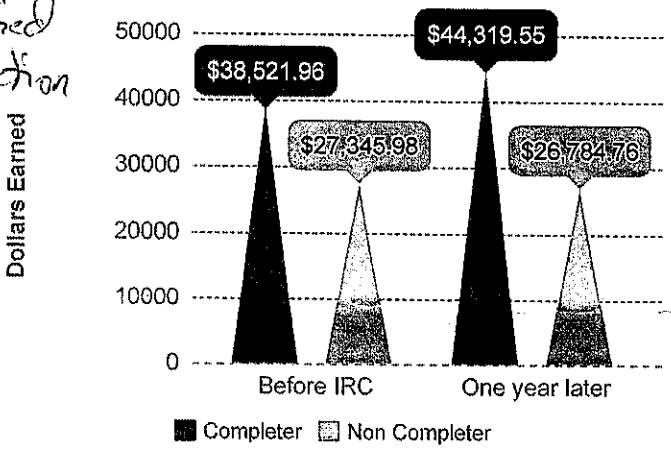
Did You Know that You Can Earn Industry Recognized Credentials at CCV?

- Safety
- Quality
- Processes
- Maintenance*
- Green
- CPT



VT / DOL Aggregated Wage Study

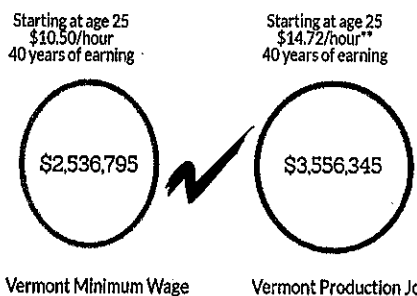
Certified Production Tech



In an Aggregated Wage Study conducted by the Vermont Department of Labor in 2018, researchers found that people who completed one or more CCV's / MSSC industry-recognized credentials (IRC) received an average annual wage increase one year later - compared to people who did not complete an IRC.



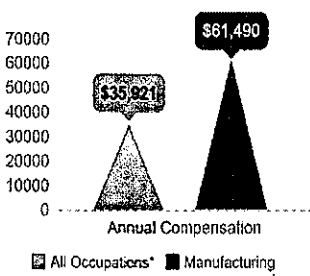
Source: National Association of Manufacturers, 2018



If you were to start a production job at the average rate and had earnings over 40 years, you would earn just over one million dollars more over your lifetime.

** Source: Indeed.com comparison from Vermont production jobs listed in the last 36 months.

Vermont Annual Wage Compensation



*All Vermont Occupations (Non-Farm)
Source: National Association of Manufacturers, 2018

To Learn More ...
Contact CCV Workforce Education Program to learn how you too can invest in a future career in manufacturing.
Visit ccv.edu/workforce or email us at: workforce@ccv.edu

The Community College of Vermont is an equal opportunity employer.

*Programs developed through a grant from the U.S. Department of Labor.

