



# **Right Skills Now CNC Mill and Lathe Operations Program**

**Applicant Information Pack  
For Swagelok Sessions**

## Right Skills Now - CNC Mill and Lathe Operations

Cuyahoga Community College's Right Skills Now program is a 180-hour training program combined with a 320 hour paid internship focused on the knowledge and skills necessary for employment as an operator on a CNC Mill or Lathe.

This fast track training program designed for people to obtain high-quality manufacturing jobs contains two nationally recognized credentials; the National Career Readiness Certificate and the National Institute of Metal Working Skills, (NIMS) CNC Operations Certificate.

The program starts off with 180 hours of technical training covering safety, shop floor calculations, measurement and gaging, machining fundamentals, quality assurance, communications, material composition and CNC mill and lathe operations. Students who successfully complete all training and attendance requirements of the technical training will begin an 8 week, 40 hour per week, paid internship at a local company. After the internship students return to the classroom to prepare for the National Institute of Metal Working Skills, (NIMS) Level 1 certificate exam in either CNC Mill or Lathe Operation.

### Requirements

- High school diploma or equivalent
- Skills validation by achieving a WorkKeys Silver NCRC Level 4 in Applied Math, Graphic Literacy & Workplace Documents
- Ability to attend all program sessions
- Agree to background check/drug test

### Program Content

- Safety in the Shop
- Shop Floor Calculations
- Blueprint Reading for Machinists
- Measurement & Gaging
- Machining Fundamentals
- CNC Mill Operations
- CNC Lathe Operations
- Communication Skills
- Quality Systems
- NIMS Exam Preparation
- NIMS Exam (Lathe or Mill)
- 8 Week Paid Internship

**Program Fee: \$4295.00**

### First Steps for Applicants:

1. Notify Mike White of interest in program and obtain Applicant Pack.
2. Register and take National Career Readiness Certificate exams, scoring level 4 or above on each of the three exams.

**Next day class:** TBD – Feb 2021 (Mon - Thurs, 9:00pm – 1:00pm) – 10 Weeks at Metro Campus

**Next evening class:** TBD - Apr 2021 (Mon - Thurs, 5:30pm – 9:30pm) – 10 Weeks at Metro Campus

**Program Contact: Mike White (216) 987-3040, [Michael.white@tri-c.edu](mailto:Michael.white@tri-c.edu)**

## **Action Steps**

- 1. Notify Mike White of interest in program and obtain Applicant Pack
- 2. Register and take National Career Readiness Certificate exams, scoring level 4 or above on each of the three exams (See pages 9 & 10)
- 3. Send test results with proof of high school diploma/GED and current resume to Mike White.
- 4. Interview with Swagelok scheduled (Resume required)
- 5. Background check
- 6. Notification of acceptance
- 7. Register and pay for training
- 8. Training at Tri-C (10 weeks)
- 9. 8-week paid internship at Swagelok Company (must score 70% or better in all subjects and meet attendance requirements to enter the internship)
- 10. NIMS exam prep class at Tri-C (optional)
- 11. Take written NIMS exam (optional)

***Students who successfully complete the program will receive an employment offer from Swagelok Company.***

# Right Skills Now – CNC Mill and Lathe Operations

## Course Descriptions

### Shop Safety

Learn how to safely work in a manufacturing environment. Topics include personal protection equipment, walking and working surfaces, fall hazards, fire safety and emergency action.

### Shop Floor Calculations

This course covers the math skills required on the shop floor including calculator use, working with fractions, fraction – decimal conversion, rounding, percentages and ratios.

### Blueprint Reading for Machinists

Blueprints are the universal form of communication in manufacturing. Learn how to read and interpret the blueprints commonly used in machining. Topics include orthographic projection, line types, section views, dimensions, notes, tolerances and a GD & T overview.

### Measurement and Gaging

Inspection is a critical function in machining. Learn how to use and read the measurement and gaging tools commonly used by a CNC operator, including OD/ID/depth micrometers, dial calipers, thread gages and optical comparator. Overview of coordinate measuring machine is also provided.

### Machining Fundamentals

Learn the basic principles of machining including turning and milling machine processes and tools, calculation of speeds and feeds, coordinate systems, cutting fluids, machine lubrication and proper use of common hand tools.

### CNC Mill Overview

Learn about machine layout, tooling, machining processes, workholding, G & M codes and program format for a 3 axis Machining Center.

### CNC Lathe Operations

Learn how to mount tools, set geometry offsets, locate program zero, activate a program, run parts, inspect parts and adjust offsets to maintain part tolerance on a 2 axis CNC lathe.

### NIMS CNC Operations Exam Prep

Complete the performance requirements of the NIMS Credentialing Achievement Record and prepare for the written NIMS CNC Lathe or Mill Operations exam.

### Communication Skills

Gain the skills to communicate with others and work effectively in a team environment.

### Quality Improvement

Systems and tools that ensure components are within quality specifications

# Payment and Funding Options

## Workforce Development Scholarships

### Gene Haas Machine Technology Scholarship

Cuyahoga Community College has received a limited number of scholarships (\$800) from the Gene Haas Foundation to support the Right Skills Now CNC Operations program. These funds are distributed through the Workforce Development Scholarship process listed below.

### Ohio Department of Higher Education Scholarship

Cuyahoga Community College has received a limited number of \$1000 scholarships from the Ohio Department of Higher Education to support the Right Skills Now CNC Operations program. These funds are distributed through the Workforce Development Scholarship process listed on the top of page 6.

### Lozick Foundation Scholarship

Cuyahoga Community College has received funding from the Edward A. & Catherine L. Lozick Foundation to provide a scholarship of \$1074.00 to students accepted in the Right Skills Now program.

## Cuyahoga Community College Workforce Development Scholarship Assistance SCHOLARSHIP PROCESS (2019-2020)

Please have the following at the time you apply:

- Current or returning students: Student ID number
- New student: Call 866-933-5175 and select option 1 to obtain an S# (Please ask the customer service representative how to obtain your Password)

Go to [www.tri-c.edu/scholarships](http://www.tri-c.edu/scholarships) to access the scholarship page. Click on "Tri-C Scholarship Application" under "Tri-C Scholarship Opportunities". Click on "Sign in with your Institution". You will need to have your student ID number ready to begin to log in.

1. Complete all required areas of the online application. Click "Finish and Submit" when done.
2. When completing the essay keep the punctuation very basic to avoid error messages.
3. Send an email to [Latina.johnson@tri-c.edu](mailto:Latina.johnson@tri-c.edu) and copy [Michael.white@tri-c.edu](mailto:Michael.white@tri-c.edu) to confirm that you have completed and submitted your application. Please include your S#, last 4 of SSN, the name of the class and the date you would like to start.

## **Additional Scholarship Opportunities**

### **College NOW - Scholarship**

College Now Greater Cleveland Manufacturing Scholarships may be available.

Here is the link for more information and to apply: <https://app.smarterselect.com/programs/60157-College-Now-Greater-Cleveland>

### **Military Veteran Funding – Ohio Dept. of Job and Family Services**

Each of the Ohio Means Jobs Local One Stop Career Centers has a Veterans Representative. See page 7 for locations and more info.

### **Payment Plan**

Cuyahoga Community College offers a payment plan for registration fees. One fourth of the registration fee plus a \$25 non-refundable payment plan fee is due at time of registration. The remaining amount is divided into 3 equal payments spread out evenly throughout the entire program with the last payment due by the last day of program.



### **Ohio Means Jobs - Local One Stop Career Centers**

Your local One Stop Career Centers provide a host of resources for job seeker and employers. One of the services provided are training vouchers for those deemed eligible. To determine if you are eligible to receive a training voucher to pay for your tuition, please contact your One Stop. Each One Stop has an orientation process that you must go through. ***The process may take up to 3-4 weeks to complete.***

<p>Downtown Location  1910 Carnegie Avenue  Cleveland, Ohio 44115  (216)777-8200  <i>Orientation Held Monday from  8:30 AM-2:30 PM  (Orientation takes about 90 minutes)</i></p>	<p>Quincy Place  8111 Quincy Avenue - ROOM 262  Cleveland, Ohio 44104  (216)561-5503  <i>Orientation Held: Wednesdays  8:00 AM and 2:00 PM  (Orientation takes about an hour)</i></p>
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### **Cuyahoga County (CCPL) and Cleveland Public Library (CPL) Branch Locations 9:00-5:00**

#### West and Southwest

Monday	CCPL Brooklyn Branch, 4480 Ridge Road
Tuesday-Friday	CCPL Parma Branch, 6996 Power Boulevard
Monday, Tuesday & Wednesday	CCPL Fairview Park Branch, 21255 Lorain Road
Thursday & Friday	CCPL North Olmsted Branch, 27403 Lorain Road

#### East and Southeast

Monday, Wednesday & Friday	CCPL Garfield Heights Branch, 5409 Turney Road
Tuesday & Thursday	CCPL Maple Heights Branch, 5225 Library Lane
Monday- Friday	CCPL Warrensville Heights Branch, 4415 Northfield Road
Monday & Wednesday	CPL Fleet Branch, 7224 Broadway Avenue
Tuesday & Thursday	CCPL South Euclid-Lyndhurst Branch, 1876 South Green Road
Friday	CCPL Mayfield Branch, 500 SOM Center Road

#### What to Bring to Orientation:

- E-mail address (valid e-mail that can be accessed)
- Copy of your Resume (\*Resume assistance is available)
- Social Security Card
- Driver License or State Photo Identification Card
- DD214 (If you are a Veteran)
- If you receive unemployment compensation, please bring a copy of your "Benefits of Rights" letter or unemployment compensation pay stub

You can post your Resume on [www.ohiomeansjobs.com/cuyahoga](http://www.ohiomeansjobs.com/cuyahoga)

## **Cuyahoga County Education Assistance Program (EAP)**



Cleveland-Cuyahoga County

Nicole Cranford

Email:

cranfn@ecjobs.us

Phone: 216-777-8167

### **Eligibility Criteria:**

1. The recipient of the EAP fund must be a resident of Cuyahoga County, who is at least eighteen (18) years of age, and will be selected based on objective criteria, regardless of race, ethnic origin and sexual orientation.
2. Under County Council Ordinance Number O2012-0007, Ohio Means Jobs |Cleveland-Cuyahoga County may give priority to awarding EAP's based on an individual's financial need.
3. Employees of Cuyahoga County and Ohio Means Jobs |Cleveland-Cuyahoga County are not eligible to participate in the program. Additionally, immediate family members that are dependents of employees of Cuyahoga County and Ohio Means Jobs |Cleveland-Cuyahoga County are not eligible to participate in the program. Immediate family members include an employee's spouse, child, child's spouse, stepchild, stepchild's spouse, grandchild, grandchild's spouse, parent, stepparent, parent-in-law or sibling.

## **Ohio Means Jobs – Other Counties**

### **Lake County Job & Family Services**

177 Main Street Painesville, OH 44077

(440) 350-4000 Main (440) 918-4000 Lake County West (440) 428-4838 Lake County East

TTY/TTD services available in the Resource Center

### **Ohio Means Jobs-Lorain County**

Main Office: 42495 North Ridge Road, Elyria, Ohio 44035

Business hours are Monday through Friday, 8:00 am to 4:30 pm.; 440-324-5244

Satellite Office Locations: Lorain County Community College, [Employment & Career Services](#)

1005 North Abbe Road, Elyria, Ohio 44035; 440-366-4076

### **Ohio Means Jobs-Geauga County (GAPP)**

(440) 285.5842; info@gapp-inc.com

### **Ohio Mean Jobs-Medina County (Medina County Workforce Development Center)**

3721 Pearl Road, Medina, OH 44256

P: 330-723-9675 F: 330-722-4657



## ACT/National Career Readiness Certificate

ACT's National Career Readiness Certificate (NCRC) is a portable credential that demonstrates achievement and a certain level of workplace employability skills in Applied Mathematics, and Locating Information, and Reading for Information. In the future, ACT Career Credentials powered by ACT WorkKeys is an expanding program that will offer certifications in other areas. Individuals can earn the NCRC by taking three WorkKeys® assessments:

### *Applied Mathematics, Workplace Documents and Graphic Literacy*

WorkKeys assessments measure "real world" skills that employers believe are critical to job success. Test questions are based on situations in the everyday work world.

There are five levels of difficulty. Level 3 is the least complex, and Level 7 is the most complex. The levels build on each other, each incorporating the skills assessed at the previous levels.

***Students must score at Level 4 on each of the assessments to enter the Right Skills Now- CNC Mill and Lathe Operations program.***

### Test Content

For more information on test content please refer to ACT's website:

<http://www.act.org/content/act/en/products-and-services/workkeys-for-job-seekers/assessments.html>

### Link to Free Practice Tests from Ohio Means Jobs

- <https://jobseeker.ohiomeansjobs.monster.com/home.aspx>

(Click on "Online Training" to access the free practice exams.)

### Taking the ACT WorkKeys Exam

There are two options for taking the ACT WorkKeys exam:

- **Tri-C Testing Center** (\$54 fee for all three tests). See page 10.
- **Practice Test – Simulation Mode** If the \$54 fee presents a financial hardship, you can submit the results from the free practice exam done under simulation mode. Create an account with Ohio Means Jobs and take the tests using the test simulation mode. See note at bottom of page 10.

# ACT National Career Readiness Certificate

## ACT WorkKeys Tests Registration Process for Tri-C Testing Center

1. Candidates **must first schedule** an appointment 72 hours prior to desired date of testing. Please contact the Certification Testing Center at 216-987-4040 to schedule an appointment. The testing center will provide candidate with a **Course Requisition Number (CRN)** after scheduling.
  - Tests must be scheduled consecutively all in the same day.
  - Once the Test Administer schedules your exam, you will receive an email confirmation verifying your exam appointment.
2. Candidates can **purchase** the ACT WorkKeys *Applied Mathematics*, *Workplace Documents* and *Graphic Literacy* exams by calling **(216) 987-3075 option 1** and providing the **CRN**.
  - Three test vouchers (one for each exam) are combined into one CRN for purchase: **Cost is \$54.00**
  - Retake exam (**Cost is \$18.00 per exam**)
  - Test information:
    - *Applied Mathematics* test is 55 minutes long with 33 questions
    - *Graphic Literacy* test is 55 minutes long with 38 questions
    - *Workplace Documents* test is 55 minutes long with 33 question
3. On the day of your exam, you will need a current valid ID with photo (issued by school/city/state/federal government agency). Please bring a receipt of purchase of the test voucher to the testing center. Arrive 10-15 minutes prior to exam appointment for check-in.

*All ACT WorkKeys exams are held at 2415 Woodland Avenue, Room 231, Cleveland, OH 44115. Results are available immediately after the test is finished. Lockers are provided free of charge to store personal belongings.*

Testing Center Hours: Monday - Friday 8:30am – 4pm

***Candidates should arrive to the testing center a minimum of 15 minutes prior to their appointment time. Current valid ID with Photo, issued by school/city/state/federal government agency required.***

***Note: If the \$54 test fee presents a financial hardship, you can submit the results from the free practice test listed on page 9. We recommend that you create an Ohio Means Jobs account and save the test scores. Select the simulation test mode, take test and save the results as a pdf file. Email the pdf file for each test (Applied Math, Graphic Literacy & Workplace Documentation) to [michael.white@tri-c.edu](mailto:michael.white@tri-c.edu) with a statement saying the \$54 fee presents a financial hardship.***

## **National Institute of Metal Working Skills, (NIMS) Certificate**

The National Institute for Metalworking Skills (NIMS) was formed in 1995 by the metalworking trade associations to develop and maintain a globally competitive American workforce. NIMS sets skills standards for the industry, certifies individual skills against the standards and accredits training programs that meet NIMS quality requirements.

NIMS operates under rigorous and highly disciplined processes as the only developer of American National Standards for the nation's metalworking industry accredited by the American National Standards Institute (ANSI).

### **NIMS Skill Standards**

NIMS has developed skills standards in 24 operational areas covering the breadth of metalworking operations. The Standards range from entry (Level I) to a master level (Level III). All NIMS standards are industry-written and industry-validated, and are subject to regular, periodic reviews under the procedures accredited and audited by ANSI.

### **NIMS Credentials**

NIMS certifies individual skills against the national standards. The NIMS credentialing program requires that the candidate meet both performance and theory requirements. Both the performance and knowledge examinations are industry-designed and industry-piloted. There are 52 distinct NIMS skill certifications.

### **CNC Lathe Operator Level 1      CNC Mill Operator Level 1**

NIMS offers CNC Lathe Operator Level 1 and CNC Mill Operator Level 1 credentials. Students in the Right Skills Now program work toward earning both of these credentials. Earning a credential is a two part process. The first part is the completion of a Credentialing Achievement Record (CAR). The CAR is a check list of critical work activities and experience that is co-initialed by the trainer and trainee as they are completed. After the CAR is completed an Affidavit of Successful Completion is filled out and the student registers with NIMS (\$40 one-time fee). The Affidavit is then submitted to NIMS and once accepted by NIMS the student is eligible to take the written exam (\$35 fee for each exam). The credential is awarded when the exam is passed. CNC Lathe Operator and CNC Mill Operator are two separate credentials each requiring a CAR, an Affidavit and a written test.

### **More Information on NIMS**

For more information on NIMS please see their website: [www.nims-skills.org/](http://www.nims-skills.org/)

### **Job Responsibilities for Right Skills Now Program Graduates**

- Perform basic machine setup including mounting and setting tools, mounting chuck jaws or other work holding hardware, setting program zero location and activating the proper part program.
- Conduct production runs and adjust offsets to ensure work pieces are within specified tolerances and quality standards.
- Complete records and forms.
- Responsible for maintaining a clean and safe work environment.
- May work alone, with minimal supervision, or with other technicians.
- Recognize and report machine malfunctions.
- Responsible for routine scheduled machine maintenance.
- Coordinate and work in conjunction with service technicians in the performance of major maintenance tasks.

### **Future Career Opportunities**

With further education and experience, there are numerous career advancement opportunities within the manufacturing industry.

Career options include setup technician, part programmer, shop floor supervisor and manufacturing engineer positions.



**RIGHT SKILLS NOW CNC OPERATIONS TRAINING PROGRAM  
PARTICIPANT AGREEMENT AND CONTRACT**

The College team is committed to ensuring you succeed in the training program. This includes all aspects, the technical training, certification and internship. Your success is dependent as well on you fully committing to the program. This includes attendance, preparation, commitment and ability to be a team player and work well with others to achieve positive outcomes. Please read thoroughly the information below and, if you are able to agree to the requirements, please initial after each statement and sign and date the bottom of the form. We are looking forward to receiving your application.

**ATTENDANCE, COMMUNICATION AND PARTICIPATION**

It is expected that you will have 100% attendance throughout the technical program. If you are ill you must contact your instructor at least one hour prior to class start time.

Being late to the program or leaving early is not acceptable; be sure to start early enough for the program to ensure you will be there approximately 15 minutes early. (No more than two late arrivals during the program is acceptable; more than two will be reviewed to determine if it is advisable to continue the program). Information regarding classroom absences, tardiness, working well with other participants, being a positive influence in the classroom and on the manufacturing floor, etc. may be shared with the internship partners. These are vital employability skills that employers look for when determining if they wish to hire a person. Frequently the instructors are asked this information by the employer. The participant is expected to be available for all meet and greet sessions, test prep sessions, job fairs, and internship assignments.

Please initial that you have read and agree to the above. \_\_\_\_\_

You are required to update the Right Skills Now Program Manager in the event the contact information or employment status changes during and after the training period, as well as during the retention period once employed.

Please initial that you have read and agree to the above. \_\_\_\_\_

**EMPLOYMENT VERIFICATION AGREEMENT**

I understand I am required to contact the Right Skills Now Program Manager as soon as I receive official notification that I am employed. I will provide the company contact information for the college staff to perform the necessary follow up to verify employment.

I understand that upon completion of the program the Right Skills Now Program Manager will make regular calls (monthly) for up to nine months after I exit the program to check on my employment status and/or to see if I am actively seeking employment. I agree to respond to the request for information.

I understand the above information and agree to participate fully and give 100% effort to fully engage in every aspect. My signature below demonstrates my understanding and commitment.

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

