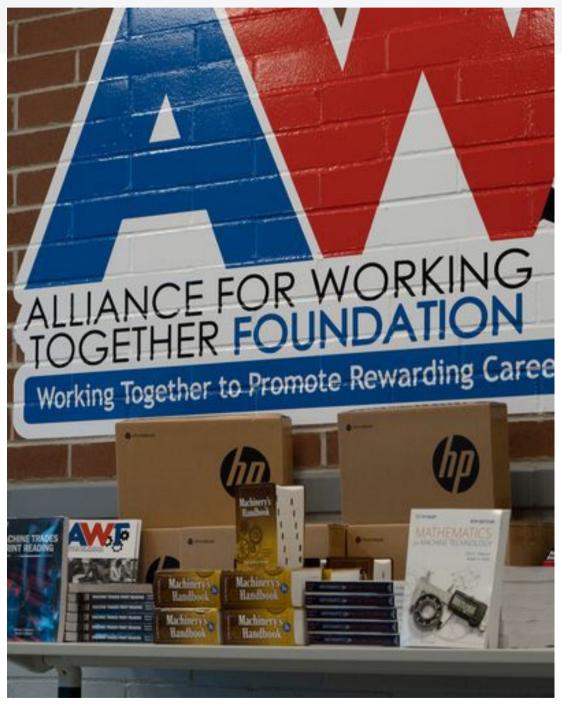
## AWT APPRENTICESHIP PROGRAM



The Alliance for Working Together 8980 Tyler Blvd Mentor, OH 44060



www.thinkmfg.com/apprenticeships

# INTRO



### How the Program Works

- The AWT Apprenticeship Program is a great way to train your incumbent employees
- AWT handles all Federal and State documentation for the apprenticeship
- AWT keeps a record of the related instruction and on-the-job training hours
- AWT handles the entire application process and on-boarding process for the apprenticeship
- AWT provides the online curriculum and enrolls apprentices in their online classes
- AWT schedules the in-person, hands-on courses with seasoned experts in the sector

### Apprenticeship benefits to employer

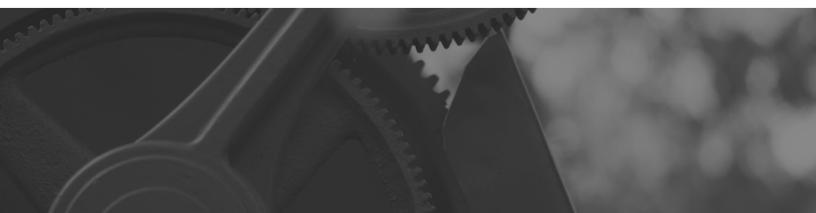
#### Boost employee performance and retention

You can use apprenticeship training to:

- Fill key skill gaps in your business
- Build a pipeline of skilled workers
- Boost employee motivation by investing in their development
- Improve retention/reduce employee turnover

#### Cost-effective training solution

Tuition and Books for AWT's Apprenticeship Program cost \$2,800 per employee per year. Through TechCred, you are able to get \$2,000 back upon the completion of one year. AWT staff will help companies fill out the Tech-cred application to ensure reimbursement



# ABOUT THE PROGRAM



- The AWT Apprenticeship is a 4-year training program where apprentices will become journeyman machinists. The program is registered through the Department of Labor and ApprenticeOhio
- Apprentices will choose to receive their Journeyman Certificate in one of the following occupations: Tool & Die Maker, Mold Maker, Precision Machinist, Tool Programmer/Numerical Control
- The AWT Apprenticeship program blends online and classroom instruction with on-the-job learning so participants can earn income while receiving training and education
- Online classes are work at your own pace; this allows apprentices to balance their work, personal life, and education
- The in-person instruction is one day a week for two hours and is project based so the apprentices get hands-on experience with the equipment and machinery. There are 20 in-person classes in a semester / 40 classes in a year
- The apprentice will be required to get 8,000 hours of on-the-job training over the course of 4 years. On-the-job training will be delivered by the employer. All of the tasks relevant to the occupation that the apprentice completes at work will be counted towards their on-the-job training
- To incentivize the program to employees, employers must agree to provide wage increases to the apprentice every semester of the 4-year program
- Individuals who complete the AWT Apprenticeship are eligible to receive 21 college credits at Indiana Wesleyan University towards the completion of their Associates degree in Organizational Management with a specialization in Advanced Manufacturing Processes (AMP), at no additional cost. A potential value of approximately \$6,300. If an employee pursues this degree, it can be obtained 100% online.
- 24 college credits will be granted by Lakeland Community College. This is a potential value of \$4,000!

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### **EDUCATION** Related Instruction

Apprentices receive related instruction that complements on-the-job learning. This instruction delivers the technical, workforce, and academic competencies that apply to the job. Registered apprenticeships require apprentices to receive a total of 576 hours of Related Instruction. AWT's Apprenticeship uses an online portal for Related Instruction allowing apprentices to complete the work with more flexibility.

Apprentice Year	Online Courses						
Year One	A.W.T. 1000 Basic Shop Safety						
	A.W.T. 1130 Precision Machine Technology I						
	A.W.T. 1230 Precision Machine Technology II						
	A.W.T. 1100 Basic Blueprint						
	A.W.T. 1600 Basic applied Shop Math						
Year Two	A.W.T. 2800 CNC G&M Codes / HAAS Academy						
	A.W.T. 2810 Troubleshooting						
	A.W.T. 2100 Intermediate Blueprint						
	A.W.T. 2600 Shop Measurements & Applied Math						
Year Three	A.W.T. 3360 Fusion 360 CAD CAM						
	A.W.T. 3800 Okuma - Gosiger CNC Option						
	A.W.T. 3900 GD&T / Quality Control / SPC / Inspection						
	A.W.T. 3100 Intermediate Blueprint – GD&T						
	A.W.T. 3600 Intermediate Applied Math						
Year Four	A.W.T. 4200 Metallurgy						
	A.W.T. 4600 SolidWorks						
	A.W.T. 4700 Manufacturing Technology						
	A.W.T. 4600 Advanced Math						
	* Additional Selected Elective *						

### **EDUCATION** In-person/Hands-on Instruction

### Year 1: What you will learn?

- General Machine Shop Safety and OSHA10
- Reading and Interpreting Blueprints
- Basic Applied Shop Math
- Metallurgy of steel and iron
- Proper Use of Hand Tools and Measurement Devices.
- Fundamentals of metal cutting operations to produce manufacturing parts.
- Metal Removal Processes on equipment.
  - Such as the drill press, engine lathe, milling machine, and surface grinder.

- The use of work-holding devices.
- The proper support and location of workpieces.
- Coordinate measuring machine (CMM),
- The optical comparator
- The electro-discharge machine (EDM).
- Four different projects
  - Two manual Milling projects and Two Manual Lathe Projects.

### Year 2: What you will learn?

- Troubleshooting
- Preventative Maintenance
- 2-axis CNC Lathe Introduction
  - Setup work holding and locating work offsets
  - Assembling CNC Lathe Cutting Tools
  - Locating Cutting Tools and Setting Tool Offsets
  - Boring Custom Jaws
- 3-axis CNC Mill Introduction
  - Setup work holding and locating work offsets
  - Assembling CNC Mill Cutting Tools
  - Indicating Fixture Tooling Holes
  - Applications for custom soft jaws

- Introduction to the CNC Mill Programming
  - Learn all standard G and M codes
  - Manually create tool paths
  - Programming Resources
  - Writing 2.5-axis mill programs
  - Understanding machine and fixture clearances
- Introduction CNC Lathe Programming
  - Learn all standard G and M codes
  - Manually create tool paths
  - Writing 2-axis lathe programs
  - Programming Resources
  - Programming and cutting tool parameters
  - Understanding machine clearances

### **EDUCATION** In-person/hands-on Instruction

### Year 3: What will you learn?

- Trigonometry
- Geometric Dimensioning and Tolerancing
- Inspection and Quality Control
- Fusion360 / GibbsCAM



### Year 4: What you will learn?

- \* Solidworks 3D Modeling Software
  - Creating Sketches and Engineering Drawings
  - Modeling 3D Geometries
  - Hole Features
  - Designing Workholding Components
  - Developing Assembly Models
  - Fixture Design and Applications
  - Designing Custom Cutting Tools
  - Advanced Part Modeling

- Introduction to CAD/CAM Software
- 2-Axis Turning CAM Operations
- 2.5-Axis Milling CAM Operations
- 3-Axis Milling CAM Operations
  - Simultaneous X, Y, and Z axes milling
- 3-Axis Turning CAM Operations
  - Y-axis live tooling programming
  - C-axis indexing & C-axis simultaneous
- Metallurgy
- Job Planning
- Elective of the Apprentice's Choice
  - Die making
  - Moldmaking
  - Jig and Fixture



### HOW TO SIGN UP

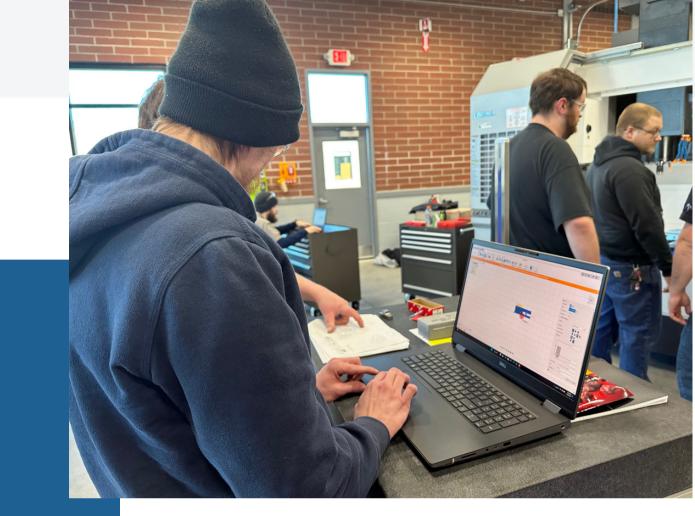


### **ENROLLMENT PROCESS**

- 1. Fill out the AWT apprenticeship application *(thinkmfg.link/packet)* and email it to the AWT Foundation at contact@thinkmfg.com
- 2. AWT will schedule an interview and aptitude test with the participant
- 3. After the interview, an AWT Foundation Staff member will notify the employee and company of the acceptance into the AWT Apprenticeship Program via email with the following attachments:
  - i. Employer Acceptance Agreement (Intent-to-Sponsor Letter) form
  - ii. Earn and Learn form
  - iii. An Ohio Jobs and Family Services apprenticeship agreement (filled out by the apprentice)
  - iv. Apprenticeship registration invoice (The cost of the program is \$2,800 per employee per year)
- 4. As soon as you get your acceptance email; begin filling out the Tech-Cred reimbursement application during an application period

#### Cohorts begin every Fall and Spring





### **OTHER TRAINING OPTIONS**

If the four-year time commitment is too long, you may register your employees into certain years of the program depending on the set of skills you want them to gain. (Ex: CNC Mill and Lathe Programming only: Year 2) If you choose to go this route, the employees will not receive the Journeyman Certificate.

#### **Company Specific Training**

We give companies the option to buy out an entire class for only their employees. This can be customized to what the company needs.

- The company can decide to go the traditional, 4-year long, Registered Apprenticeship, Journeyman certificate route
- The training can be a short term program, whether you want it to be 6-months long or a year, etc. (Employees will not receive their Journeyman's Certificate)



Phone: 440-462-1995

### **AWT Apprenticeship Application**

Application # (internal use only):

Personal Information		2.735				
Last	First	MI	SSN#	Email		
Street Address	City	ST	Zip	Home Phone	Mobile Phone	
Are you entitled to work in the United States (Y/N)?		Are you 18 older (Y/M		If yes, Date of Birth (WW-DD-YYYY)		
Have you been convicted of a felony or been incarcerated in connection with a felony in the past seven years (Y/N)?			explain:			
Military Service (Y/N)?	Ritary Service (Y/N)? If yes, which branch?		eteran?	If yes, which War?		

How did you hear about this apprenticeship program?

regarding work records.

Prior Work Experience		12/01/07/07 1	ana an								5759733Z	
	Current or Mos	t Recent	Prior								Prior	
Employer												
Address												
City, ST, ZIP												
Telephone												
Name of Immediate Supervisor												
Dates of Employment	From	То	From				То				From	То
Position/Job Title												
Pay												
Reason for Leaving												
May We Contact												
Education												
	Name/Location	1	Last Year Complete						_	Degree	Major or Emphasis	
High School				9		10		11		12		
College/University				1	Γ	2		3		4		
Trade School				]1		2		3		4		
Other				1		2		3		4		
List any applicable special skills, training or proficiencies.						-						
er van een die bekende die gebeerde die keer. N												
Disclaimer - By signing, I hereby certify the is correct. I understand that faisification of lead to my dismissai if hired. I also provide	this information ma	ry prevent me from being hired or	. Signa	ture	e							Date

Full Application packet available at thinkmfg.link/packet



### APPRENTICE REQUIREMENTS AND RESPONSIBILITY

### **Requirements:**

1.Applicant must be 16 years of age or older

2.Applicant must be a High School graduate or have a GED

3.Applicant must be capable of doing the work of an apprentice with or without reasonable accommodation

4. All applicants must take a mechanical aptitude test. The aptitude test will be administered by the AWT Foundation and scored by the AWT Foundation.

### Apprentice Responsibility:

- Show-up to at least 90% of the in-person classes
- Complete the online course modules on time
- Pay for textbooks (some companies choose to pay this, some do not, it's on a company-bycompany basis)
- Track on-the-job training hours and turn them into AWT monthly





## THANK YOU



#### The Alliance for Working Together 8980 Tyler Blvd

www.thinkmfg.com/apprenticeships contact@thinkmfg.com

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