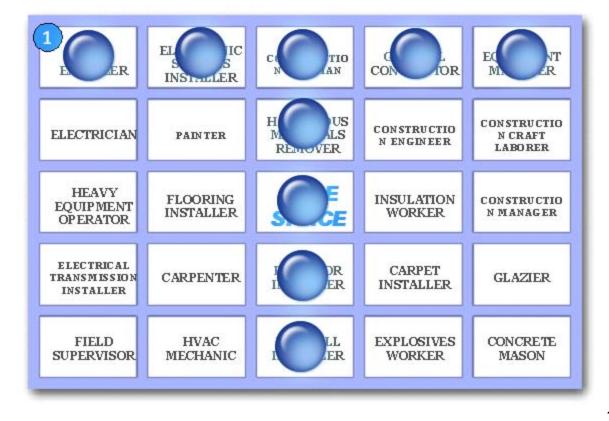
## BINGO Manufacturing Careers I CTAE Resource Network, Instructional Resources Office

## **Directions for the Instructor**

- 1. Print the bingo cards. Twenty six different cards are included. Print additional cards at random if needed. Cut each sheet to separate the cards. Cards may be laminated for durability.
- 2. Give each student a bingo card and chips, markers, or scrap paper. If paper is to be used, ask students to tear or cut twenty-five pieces of paper about one-half inch square. If the cards have been laminated, students can mark their cards with erasable markers.
- 3. Explain to the students that you will read the definitions to the class and that they should mark the correct answer on their card. Note that all cards do not have all the answers.
- 4. At random, read ONLY the definitions from the list. Mark the checkbox beside the definitions as they are used. The student should place a chip on the cell with the correct response.
- 5. When a student has placed chips on five spaces in a row (diagonally, vertically, or horizontally) the student should call "Bingo". Ask the winning student to call out their answers. Check their answers to make sure those definitions have been used.

## Variations:

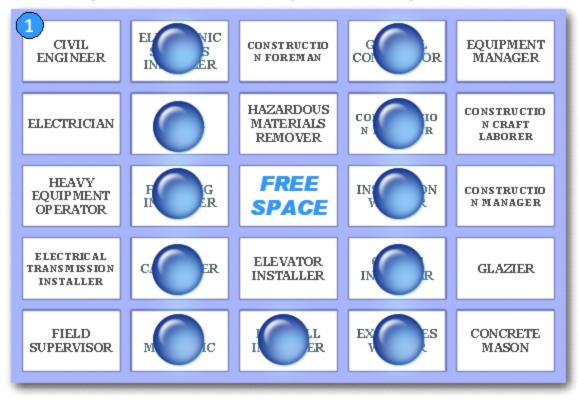
• T-Bingo: The card must be marked in the shape of a "T" to call Bingo.



	ELECTRONIC SYSTEMS INSTALLER	CONSTRUCTIO N FOREMAN	GENERAL CONTRACTOR	EQUIT
ELECTRICIAN	PAINTER	HAZARDOUS MATERIALS REMOVER	CONSTRUCTIO N ENGINEER	CONSTRUCTIO N CRAFT LABORER
HEAVY EQUIPMENT OPERATOR	FLOORING INSTALLER	FREE SPACE	INSULATION WORKER	CONSTRUCTIO N MANAGER
ELECTRICAL TRAN SM ISS ION IN STALLER	CARPENTER	ELEVATOR INSTALLER	CARPET INSTALLER	GLAZIER
STOOR	HVAC MECHANIC	DRYWALL INSTALLER	EXPLOSIVES WORKER	CCOTE

•Corners Bingo: The four outer corners of the card must be marked to get Bingo.

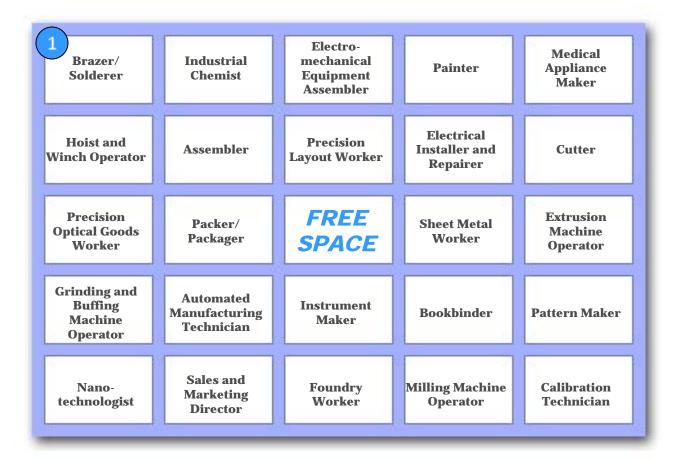
•U-Bingo: The card must be marked in the shape of a "U" to call Bingo.



Correct Response	Definition	Used
Assembler	Works in factories, assembling products with machines or manually and monitors equipment. Highly specialized skills may be required.	
Automated Manufacturing Technician	Applies robotics, computers, programmable motion control, and various sensing technologies in fabrication and assembly.	
Bookbinder	Uses a variety of technology to assemble books, magazines, brochures, catalogs, calendars, or loose-leaf folios.	
Brazer/Solderer	Uses brazing and soldering techniques to fabricate metal parts and products.	
Calibration Technician	Calibrates, maintains, and repairs electrical, precision mechanical, and electromechanical instruments, and measuring and recording devices to established standards.	
Cutter	Sets up, operates, or tends machines that cut a variety of materials in the manufacturing process.	
Electrical Installer and Repairer	Installs, repairs, and maintains electrical equipment used in manufacturing processes.	
Electromechanical Equipment Assembler	Assembles or modifies electromechanical equipment or devices, such as servomechanisms, dynamometers, magnetic drums, brakes, control linkage, actuators, and appliances.	
Extrusion Machine Operator	Sets up, operates, or tends machines, such as glass forming machines, plodder machines, and tuber machines, to shape and form products, such as glassware, food, rubber, soap, brick, tile, tobacco, or cosmetics.	
Foundry Worker	Performs metalworking tasks including melting, pouring into molds, removing and dressing castings.	
Grinding and Buffing Machine Operator	Sets up, operates, or tends grinding and related tools that remove excess material from surfaces, sharpen edges or corners, or buff, hone, or polish metal or plastic products.	
Hoist and Winch Operator	Operates hoists and winches to lift or pull loads and move materials or products through the manufacturing process.	

Correct Response	Definition	Used
Industrial Chemist	Studies the make-up and behavior of chemicals and determines how they can be used in manufacturing processes such as producing plastics, paints, pharmaceuticals and silicon chips.	
Instrument Maker	Assembles, installs, calibrates, and repairs precision instruments and equipment.	
Medical Appliance Maker	Constructs, maintains, or repairs medical supportive devices, such as braces, artificial limbs, joints, arch supports, and other surgical and medical appliances.	
Milling Machine Operator	Sets up, operates, or tends milling or planing machines to mill, plane, shape, groove, or profile metal, plastic, wood, and other materials.	
Nano-technologist	Works primarily in high tech manufacturing and research laboratories manipulating microparticles to produce technologies and products on the molecular level, especially in microchip technology.	
Packer/ Packager	Packs and packages product by hand or operates and monitors machines that package products and materials.	
Painter	Selects and applies finishes such as paint and varnish to manufactured products, and other applications.	
Pattern Maker	Makes the models that go into molds to be used in castings of parts used in manufacturing.	
Precision Layout Worker	Lays out reference points and dimensions on metal or plastic stock or work pieces, such as sheets, plates, tubes, structural shapes, castings, or machine parts, for further processing.	
Precision Optical Goods Worker	Cuts, grinds, and polishes eyeglasses, contact lenses, or other precision optics. Assembles and mounts lenses into frames or process other optical elements.	
Sales and Marketing Director	Trains, directs, and supervises their sales staff and coordinates the operation of their sales department by establishing territories, goals, and quotas for sales workers.	
Sheet Metal Worker	Fabricates, assembles, installs, and repairs sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings.	

Correct Response	Definition	Used
Supervisor	Directs production workers in production or assembly of manufactured goods to ensure that the production process is carried out safely and efficiently.	
Tender	A general term used for someone who operates or monitors mechanical equipment.	
Transportation Manager	Arranges the movement of raw materials into factories and for the transportation of finished products to the markets where the goods are sold.	
Tool and Die Maker	A highly skilled worker who produces tools, dies, jigs and precision parts machines used to manufacture a variety of products.	
Welder	Constructs and repairs metal manufacturing components using welding techniques.	



Welder	Hoist and Winch Operator	Supervisor	Milling Machine Operator	Grinding and Buffing Machine Operator
Extrusion Machine Operator	Precision Optical Goods Worker	Electro- mechanical Equipment Assembler	Pattern Maker	Sheet Metal Worker
Nano- technologist	Cutter	FREE SPACE	Tool and Die Maker	Electrical Installer and Repairer
Transportation Manager	Foundry Worker	Precision Layout Worker	Instrument Maker	Painter
Industrial Chemist	Sales and Marketing Director	Packer/ Packager	Tender	Medical Appliance Maker

3 Brazer/ Solderer	Electro- mechanical Equipment Assembler	Packer/ Packager	Grinding and Buffing Machine Operator	Bookbinder
Nano- technologist	Hoist and Winch Operator	Milling Machine Operator	Automated Manufacturing Technician	Instrument Maker
Painter	Electrical Installer and Repairer	FREE SPACE	Industrial Chemist	Sheet Metal Worker
Extrusion Machine Operator	Sales and Marketing Director	Assembler	Precision Layout Worker	Calibration Technician
Pattern Maker	Cutter	Precision Optical Goods Worker	Foundry Worker	Medical Appliance Maker

Pattern Maker	Medical Appliance Maker	Extrusion Machine Operator	Tender	Milling Machine Operator
Supervisor	Precision Layout Worker	Foundry Worker	Transportation Manager	Precision Optical Goods Worker
Painter	Electro- mechanical Equipment Assembler	FREE SPACE	Tool and Die Maker	Grinding and Buffing Machine Operator
Electrical Installer and Repairer	Instrument Maker	Sales and Marketing Director	Hoist and Winch Operator	Packer/ Packager
Sheet Metal Worker	Cutter	Industrial Chemist	Nano- technologist	Welder

5 Electro- mechanical Equipment Assembler	Automated Manufacturing Technician	Painter	Instrument Maker	Bookbinder
Assembler	Packer/ Packager	Extrusion Machine Operator	Pattern Maker	Industrial Chemist
Sheet Metal Worker	Nano- technologist	FREE SPACE	Brazer/ Solderer	Hoist and Winch Operator
Electrical Installer and Repairer	Precision Optical Goods Worker	Calibration Technician	Medical Appliance Maker	Precision Layout Worker
Cutter	Sales and Marketing Director	Milling Machine Operator	Foundry Worker	Grinding and Buffing Machine Operator

6 Tender	Electro- mechanical Equipment Assembler	Precision Optical Goods Worker	Foundry Worker	Painter
Precision Layout Worker	Medical Appliance Maker	Instrument Maker	Welder	Industrial Chemist
Pattern Maker	Tool and Die Maker	FREE SPACE	Extrusion Machine Operator	Packer/ Packager
Milling Machine Operator	Electrical Installer and Repairer	Sales and Marketing Director	Grinding and Buffing Machine Operator	Supervisor
Cutter	Transportation Manager	Nano- technologist	Sheet Metal Worker	Hoist and Winch Operator

7 Nano- technologist	Sales and Marketing Director	Brazer/ Solderer	Painter	Foundry Worker
Calibration Technician	Extrusion Machine Operator	Sheet Metal Worker	Instrument Maker	Medical Appliance Maker
Hoist and Winch Operator	Precision Optical Goods Worker	FREE SPACE	Automated Manufacturing Technician	Assembler
Cutter	Precision Layout Worker	Industrial Chemist	Packer/ Packager	Electrical Installer and Repairer
Pattern Maker	Milling Machine Operator	Bookbinder	Grinding and Buffing Machine Operator	Electro- mechanical Equipment Assembler

Industrial Chemist	Tender	Pattern Maker	Grinding and Buffing Machine Operator	Sheet Metal Worker
Sales and Marketing Director	Hoist and Winch Operator	Electrical Installer and Repairer	Welder	Nano- technologist
Foundry Worker	Painter	FREE SPACE	Packer/ Packager	Supervisor
Precision Optical Goods Worker	Medical Appliance Maker	Extrusion Machine Operator	Tool and Die Maker	Cutter
Instrument Maker	Transportation Manager	Electro- mechanical Equipment Assembler	Precision Layout Worker	Milling Machine Operator

9 Brazer/ Solderer	Industrial Chemist	Medical Appliance Maker	Sheet Metal Worker	Grinding and Buffing Machine Operator
Packer/ Packager	Electrical Installer and Repairer	Precision Layout Worker	Foundry Worker	Assembler
Calibration Technician	Precision Optical Goods Worker	FREE SPACE	Painter	Automated Manufacturing Technician
Instrument Maker	Electro- mechanical Equipment Assembler	Sales and Marketing Director	Extrusion Machine Operator	Bookbinder
Cutter	Pattern Maker	Hoist and Winch Operator	Nano- technologist	Milling Machine Operator

Medical Appliance Maker	Sales and Marketing Director	Sheet Metal Worker	Precision Optical Goods Worker	Hoist and Winch Operator
Extrusion Machine Operator	Transportation Manager	Nano- technologist	Tool and Die Maker	Electro- mechanical Equipment Assembler
Foundry Worker	Painter	FREE SPACE	Packer/ Packager	Grinding and Buffing Machine Operator
Cutter	Welder	Milling Machine Operator	Tender	Electrical Installer and Repairer
Instrument Maker	Pattern Maker	Supervisor	Precision Layout Worker	Industrial Chemist

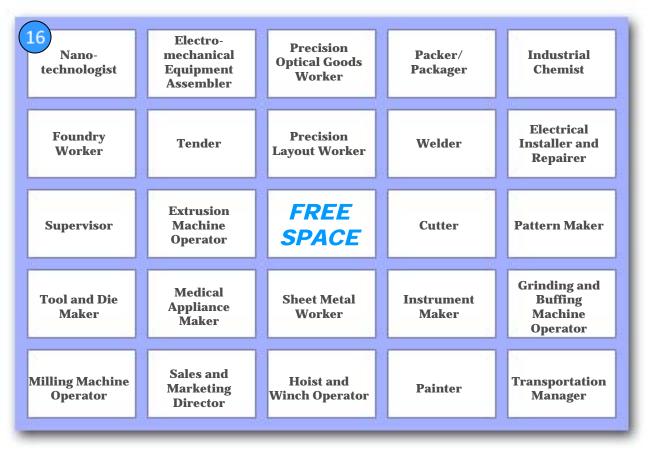
1) Bookbinder	Calibration Technician	Nano- technologist	Automated Manufacturing Technician	Industrial Chemist
Pattern Maker	Hoist and Winch Operator	Milling Machine Operator	Cutter	Extrusion Machine Operator
Grinding and Buffing Machine Operator	Foundry Worker	FREE SPACE	Sales and Marketing Director	Instrument Maker
Sheet Metal Worker	Packer/ Packager	Precision Layout Worker	Electrical Installer and Repairer	Assembler
Painter	Brazer/ Solderer	Medical Appliance Maker	Electro- mechanical Equipment Assembler	Precision Optical Goods Worker



13 Medical Appliance Maker	Packer/ Packager	Electro- mechanical Equipment Assembler	Extrusion Machine Operator	Foundry Worker
Milling Machine Operator	Nano- technologist	Electrical Installer and Repairer	Cutter	Grinding and Buffing Machine Operator
Sheet Metal Worker	Painter	FREE SPACE	Calibration Technician	Hoist and Winch Operator
Sales and Marketing Director	Pattern Maker	Assembler	Brazer/ Solderer	Industrial Chemist
Precision Optical Goods Worker	Precision Layout Worker	Automated Manufacturing Technician	Bookbinder	Instrument Maker

Tender	Industrial Chemist	Precision Layout Worker	Hoist and Winch Operator	Precision Optical Goods Worker
Grinding and Buffing Machine Operator	Transportation Manager	Pattern Maker	Sales and Marketing Director	Foundry Worker
Nano- technologist	Milling Machine Operator	FREE SPACE	Medical Appliance Maker	Instrument Maker
Extrusion Machine Operator	Sheet Metal Worker	Painter	Tool and Die Maker	Electro- mechanical Equipment Assembler
Supervisor	Electrical Installer and Repairer	Packer/ Packager	Cutter	Welder

5 Hoist and Winch Operator	Cutter	Packer/ Packager	Calibration Technician	Painter
Electrical Installer and Repairer	Nano- technologist	Sheet Metal Worker	Industrial Chemist	Brazer/ Solderer
Instrument Maker	Grinding and Buffing Machine Operator	FREE SPACE	Precision Layout Worker	Pattern Maker
Electro- mechanical Equipment Assembler	Sales and Marketing Director	Automated Manufacturing Technician	Extrusion Machine Operator	Bookbinder
Assembler	Precision Optical Goods Worker	Milling Machine Operator	Foundry Worker	Medical Appliance Maker



17 Extrusion Machine Operator	Pattern Maker	Industrial Chemist	Electro- mechanical Equipment Assembler	Bookbinder
Precision Layout Worker	Calibration Technician	Assembler	Precision Optical Goods Worker	Packer/ Packager
Foundry Worker	Instrument Maker	FREE SPACE	Sheet Metal Worker	Nano- technologist
Brazer/ Solderer	Cutter	Painter	Electrical Installer and Repairer	Sales and Marketing Director
Grinding and Buffing Machine Operator	Medical Appliance Maker	Hoist and Winch Operator	Automated Manufacturing Technician	Milling Machine Operator



9 Cutter	Hoist and Winch Operator	Instrument Maker	Calibration Technician	Packer/ Packager
Precision Layout Worker	Automated Manufacturing Technician	Sheet Metal Worker	Extrusion Machine Operator	Grinding and Buffing Machine Operator
Precision Optical Goods Worker	Electro- mechanical Equipment Assembler	FREE SPACE	Painter	Bookbinder
Assembler	Pattern Maker	Milling Machine Operator	Nano- technologist	Medical Appliance Maker
Industrial Chemist	Electrical Installer and Repairer	Sales and Marketing Director	Brazer/ Solderer	Foundry Worker

9 Pattern Maker	Tender	Industrial Chemist	Packer/ Packager	Electro- mechanical Equipment Assembler
Tool and Die Maker	Foundry Worker	Milling Machine Operator	Welder	Electrical Installer and Repairer
Cutter	Extrusion Machine Operator	FREE SPACE	Hoist and Winch Operator	Medical Appliance Maker
Instrument Maker	Transportation Manager	Precision Layout Worker	Supervisor	Sheet Metal Worker
Precision Optical Goods Worker	Nano- technologist	Grinding and Buffing Machine Operator	Painter	Sales and Marketing Director

21 Brazer/ Solderer	Grinding and Buffing Machine Operator	Electrical Installer and Repairer	Extrusion Machine Operator	Assembler
Industrial Chemist	Precision Layout Worker	Nano- technologist	Sales and Marketing Director	Medical Appliance Maker
Calibration Technician	Pattern Maker	FREE SPACE	Painter	Cutter
Milling Machine Operator	Sheet Metal Worker	Packer/ Packager	Precision Optical Goods Worker	Instrument Maker
Automated Manufacturing Technician	Foundry Worker	Electro- mechanical Equipment Assembler	Hoist and Winch Operator	Bookbinder

22 Sales and Marketing Director	Grinding and Buffing Machine Operator	Cutter	Painter	Tender
Welder	Instrument Maker	Supervisor	Pattern Maker	Nano- technologist
Hoist and Winch Operator	Industrial Chemist	FREE SPACE	Extrusion Machine Operator	Packer/ Packager
Precision Optical Goods Worker	Tool and Die Maker	Foundry Worker	Precision Layout Worker	Transportation Manager
Electrical Installer and Repairer	Medical Appliance Maker	Sheet Metal Worker	Electro- mechanical Equipment Assembler	Milling Machine Operator

3 Extrusion Machine Operator	Assembler	Milling Machine Operator	Hoist and Winch Operator	Pattern Maker
Painter	Automated Manufacturing Technician	Precision Optical Goods Worker	Brazer/ Solderer	Calibration Technician
Nano- technologist	Packer/ Packager	FREE SPACE	Sheet Metal Worker	Electrical Installer and Repairer
Electro- mechanical Equipment Assembler	Grinding and Buffing Machine Operator	Instrument Maker	Bookbinder	Industrial Chemist
Foundry Worker	Sales and Marketing Director	Precision Layout Worker	Cutter	Medical Appliance Maker

Cutter	Pattern Maker	Grinding and Buffing Machine Operator	Sales and Marketing Director	Medical Appliance Maker
Precision Layout Worker	Tool and Die Maker	Milling Machine Operator	Sheet Metal Worker	Welder
Electrical Installer and Repairer	Painter	FREE SPACE	Instrument Maker	Industrial Chemist
Transportation Manager	Foundry Worker	Supervisor	Electro- mechanical Equipment Assembler	Precision Optical Goods Worker
Tender	Nano- technologist	Hoist and Winch Operator	Packer/ Packager	Extrusion Machine Operator

25 Electrical Installer and Repairer	Medical Appliance Maker	Pattern Maker	Extrusion Machine Operator	Hoist and Winch Operator
Precision Optical Goods Worker	Automated Manufacturing Technician	Instrument Maker	Painter	Grinding and Buffing Machine Operator
Milling Machine Operator	Sales and Marketing Director	FREE SPACE	Bookbinder	Precision Layout Worker
Electro- mechanical Equipment Assembler	Cutter	Sheet Metal Worker	Foundry Worker	Packer/ Packager
Assembler	Nano- technologist	Industrial Chemist	Brazer/ Solderer	Calibration Technician

6 Sales and Marketing Director	Packer/ Packager	Tool and Die Maker	Grinding and Buffing Machine Operator	Nano- technologist
Electro- mechanical Equipment Assembler	Milling Machine Operator	Electrical Installer and Repairer	Precision Optical Goods Worker	Hoist and Winch Operator
Sheet Metal Worker	Welder	FREE SPACE	Precision Layout Worker	Transportation Manager
Medical Appliance Maker	Painter	Instrument Maker	Foundry Worker	Industrial Chemist
Supervisor	Cutter	Pattern Maker	Tender	Extrusion Machine Operator

7 Instrument Maker	Industrial Chemist	Bookbinder	Automated Manufacturing Technician	Foundry Worker
Brazer/ Solderer	Precision Optical Goods Worker	Sales and Marketing Director	Assembler	Extrusion Machine Operator
Sheet Metal Worker	Hoist and Winch Operator	FREE SPACE	Milling Machine Operator	Nano- technologist
Calibration Technician	Pattern Maker	Cutter	Medical Appliance Maker	Electro- mechanical Equipment Assembler
Precision Layout Worker	Grinding and Buffing Machine Operator	Painter	Packer/ Packager	Electrical Installer and Repairer

Painter	Pattern Maker	Supervisor	Extrusion Machine Operator	Precision Optical Goods Worker
Tender	Medical Appliance Maker	Milling Machine Operator	Foundry Worker	Welder
Cutter	Electrical Installer and Repairer	FREE SPACE	Sales and Marketing Director	Hoist and Winch Operator
Transportation Manager	Instrument Maker	Tool and Die Maker	Nano- technologist	Grinding and Buffing Machine Operator
Packer/ Packager	Precision Layout Worker	Electro- mechanical Equipment Assembler	Sheet Metal Worker	Industrial Chemist