DEPARTMENT OF LABOR

Can 16 and 17 year olds be employed in Manufacturing?

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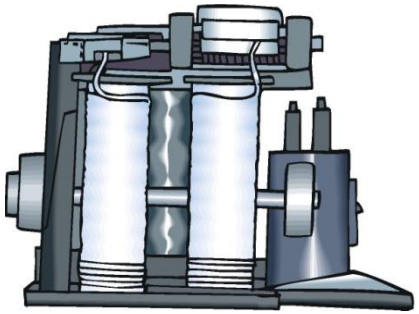
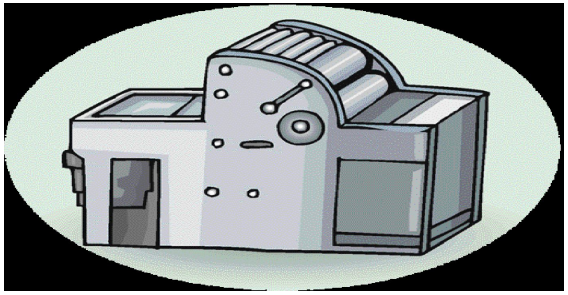
Hazardous machines for which DOL allows 16/17 year-old student learner exemptions

DOL allows 16/17 to use machines in areas below…

- HO5 Power Drive Woodworking Machines
- HO8 Power Driven Metal-Forming, Punching, Shearing Machines
- HO14 Power Driven Saws, Abrasive Discs

HO8 Power-Driven, Metal-Forming, Punching and Shearing Machines





HO 14 Power-Driven Band Saws, Circular Saws, Guillotine Shears, Chain Saws, Reciprocating Saws, Wood Chippers and Abrasive Cutting Discs

HO5 Power-Driven Woodworking Machines

DOL Training Program Definition

- Authorized and approved by a **state board of vocational education**
- Supplemented by and integrated with a definitely organized plan of instruction designed to teach technical knowledge and related industrial information given as a **regular part of the student learner's course** by an accredited school, college, or university.
- Provides for **part-time employment training** which may be scheduled
  - part of the work day
  - part of the work week
  - alternating weeks
  - other limited periods during the year
- **Source: 29 CFR 520.300 - Definitions**

DOL Student Learner Definition

- At least sixteen years of age
- Is receiving instruction in an accredited school, college or university
- Is employed by an establishment on a part-time basis, pursuant to a bona-fide vocational training program.

- **Source: 29 CFR 520.300**

Student Enrollment Verification

- (1) The student-learner is enrolled in a course of study and training in a cooperative vocational training program under a recognized State or local educational authority.

Employment Agreement

- (2) Such student-learner is employed under a written agreement which provides:
  - (i) That the work of the student-learner in the occupations declared particularly hazardous shall be incidental to his training;
  - (ii) That such work shall be intermittent and for short periods of time, and under the direct and close supervision of a qualified and experienced person;
  - (iii) That safety instructions shall be given by the school and correlated by the employer with on-the-job training.

Agreements on file at school and business

- Each such written agreement shall contain:
  - Name of student-learner
  - Shall be signed by the employer and the school coordinator or principal.
  - Copies of each agreement shall be kept on file by both the school and the employer.

- This exemption for the employment of student-learners may be revoked in any individual situation where it is found that reasonable precautions have not been observed for the safety of minors employed thereunder. A high school graduate may be employed in an occupation in which he has completed training as provided in this paragraph as a student-learner, even though he is not yet 18 years of age.
- [28 FR 3449, April 9, 1963, as amended at 33 FR 12777, September 10, 1968. Re-designated and amended at 36 FR 25156, December 29, 1971.

Illinois State Board of Education Bona-Fide Training Programs and Corresponding Local School Courses

Search Criteria

Subject Area: 21-Engineering and Technology

Federal Course: 21010-Computer Integrated Manufacturing

Search

Federal Course

Course Code	Course Title	Course Description
21010	Computer Integrated Manufacturing	Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated

State Courses

State Course Code	State Course Title	State Course Description	Max Carnegie Units	Start Year	End Year	
21010A001	Computer Integrated Manufacturing	Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.	3.00	2011		View

Search Criteria

Subject Area: 13-Manufacturing

Federal Course: 13203-Machining

Search

Federal Course

Course Code	Course Title	Course Description
13203	Machining	Machining courses enable students to create metal parts using various machine tools and equipment. Course content may include interpreting specifications for machines using blueprints, sketches, or descriptions of parts; preparing and using lathes, milling machines, shapers, and grinders with skill, safety, and precision; developing part

State Courses

State Course Code	State Course Title	State Course Description	Max Carnegie Units	Start Year	End Year	
13203A001	Machine Tool Technology/Machinist I	This course introduces students to the basic skills and machines needed in precision metal work. Students gain machining skills while working with lathes, milling machines, surface grinders, drill presses, and other equipment. In addition, students learn the basics of blueprint reading, precision measuring, layout, and machining process planning.	3.00	2011		View
13203A002	Machine Tool Technology/Machinist II	This course provides more in-depth skill development in various types of precision tool operation, especially using mills, lathes, and surface grinders to perform machining tasks. Power cutoff saws and power band saws are also covered. Students also explore the use of computer and numerical controlled machining.	3.00	2011		View
13203A005	Machine Shop Technology I	This course introduces students to the basic mechanical and technical skills common to most fields in the fabrication of metal parts in support of other manufacturing activities. Topics include shop safety, hand and power tool use, the operation and maintenance of precision metal working equipment, precision measurement, quality control, exploring the manufacturing process,	3.00	2011		View
13203A006	Machine Shop Technology II	This course builds on the skills and concepts introduced in Machine Shop Technology I. Additional skill-building activities include automated manufacturing, the use of end mills, surface grinders, drill presses, and basic welding procedures.	3.00	2011		View
13203A007	Beginning Machining	Beginning Machining course enable students to create metal parts using various machine tools and equipment. Course content may include interpreting specifications for machines using blueprints, sketches, or descriptions of parts; preparing and using lathes, milling machines, shapers, and grinders with skill, safety, and precision.	1.00	2012		View

Serving School: 050162140170006 - **Wheeling High School -- 0006** **School Year:** 2017

Cluster: Manufacturing

CIP: 48.0501 - Machine Tool Technology/Machinist. (Non Traditional - Female)

Min Carnegie Units: 2.00

Group 1

Minimum Course Selection: 1

State Course Id	State Course Title	Max Carnegie Units	Carnegie Units	Assign Course
13052A001	**Production Technology**	1.00	1.00	**Assigned**
11002A001	**Communication Technology**	1.00	1.00	**Assigned**
20101A001	**Energy Utilization Technology**	1.00	1.00	**Assigned**
21052A002	**Introduction to Technology and Engineering (Industrial)**	1.00	1.00	**Assigned**
13203A007	Beginning Machining	1.00		
21052A001	Foundations of Technology	3.00		
21006A001	Introduction to Engineering Design	3.00		

Group 2

Minimum Course Selection: 0

State Course Id	State Course Title	Max Carnegie Units	Carnegie Units	Assign Course
13203A005	**Machine Shop Technology I**	3.00	1.00	**Assigned**
13203A006	**Machine Shop Technology II**	3.00	1.00	**Assigned**
13203A001	Machine Tool Technology/Machinist I	3.00		
13203A002	Machine Tool Technology/Machinist II	3.00		
21010A001	**Computer Integrated Manufacturing**	3.00	2.00	**Assigned**

National Institute of Metalworking Skills (NIMS)

NIMS operates as the only developer of American National Standards for the nation's metalworking industry accredited by the American National Standards Institute (ANSI)

1. NIMS Credential Lathe, Drill Press, Bench Work, Layout
2. NIMS Credential Mill 2, Lathe 2, Grinding 1
3. NIMS Level 1 CNC Operator Credential
4. CNC Milling: Programming and Setup Operations Level 1

Manufacturing Skill Standards Council (MSSC)

1. Safety
2. Measurement & Continuous Improvement
3. Manufacturing Processes
4. Maintenance Awareness

Internship Process

- Application includes:
  - Student Name
  - List of Career and Technical Education courses completed
  - List of Career and Technical Education courses currently enrolled in
  - Contact information for Career and Technical Education teacher
  - Safety Training