

# J: Machine/Tool Safety

Content Area: **Generic Content Area**  
Course(s): **Generic Course, Level 1 Engineering Drawing**  
Time Period: **Generic Time Period**  
Length: **3 weeks**  
Status: **Published**

## Unit Introduction

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In this unit, throughout the school year, students will learn safe practices and develop safe habits of mind for using various hand tools and machinery that are involved in model fabrication and well as the construction/manufacturing of buildings. ...Students must successfully pass performance and/or comprehensive test/quizzes.

## Standards

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9.3.12.AC.1	Use vocabulary, symbols and formulas common to architecture and construction.
9.3.12.AC.7	Describe career opportunities and means to achieve those opportunities in each of the Architecture & Construction Career Pathways.
9.3.12.AC-CST.9	Safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.
9.3.12.AC-DES.6	Apply the techniques and skills of modern drafting, design, engineering and construction to projects.
12.9.3.ST.6	Demonstrate technical skills needed in a chosen STEM field.
12.9.3.ST-ET.3	Apply processes and concepts for the use of technological tools in STEM.

## Essential Questions

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1. How does the world/societies/cultures/environments impact/influence Architecture past, present and future?
2. What role does "safety" play in the design and construction of a building?

## Content / Skills

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*Textbooks:*

**Basic Technical Drawing** - Spencer, Dygdon, Novak, 8th edition, 2004

**Engineering Drawing & Design** - D.A. Madsen, D.P. Madsen, 6th edition, 2017

**Architectural Drafting & Design** – A. Jefferis, D.A. Madsen, D.P. Madsen, 7th edition, 2017

*Skills: See Below*

• Layout	.
• Plotting Drawings to Scale	.
• math operations	.
• measurement	.
• mechanical drawing	.
• safety	.
• sketching	.
• teamwork	.
• using CAD	.
• visualization	.