

# Dimensioning

Content Area: **21st Century Life & Careers**  
Course(s): **Level 1 Engineering Drawing**  
Time Period: **Marking Period 3**  
Length: **4 weeks**  
Status: **Published**

## Unit Introduction

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## Standards

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ARCH.9-12.9.4.12.B.(1).9	Develop technical drawings drafted by hand and computer-generated plans to design structures.
ARCH.9-12.9.4.12.B.(1).10	Demonstrate understanding of principles, conventions, standards, applications, and restrictions pertaining to the manufacture and use of construction materials, components, and assemblies, and incorporate this understanding into project design.
ARCH.9-12.9.4.12.B.7	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
STEM.9-12.9.4.12.O.(1).1	Apply the concepts, processes, guiding principles, and standards of school mathematics to solve science, technology, engineering, and mathematics problems.
STEM.9-12.9.4.12.O.(1).3	Demonstrate the ability to select, apply, and convert systems of measurement to solve problems.
STEM.9-12.9.4.12.O.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
STEM.9-12.9.4.12.O.58	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
WORK.9-12.9.3.12.A	Career Awareness
WORK.9-12.9.3.12.B	Career Exploration

## Essential Questions

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1. Why do you think we have to follow the rules and use proper techniques when dimensioning?
2. What can happen if the plan lacks techniques or details?

## 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

- 1. Students will use common drafting tools to produce and dimension a variety of basic technical drawings.
- 2. Students will learn/apply Basic Rules to Dimensioning to provide necessary information to build a part described on an Orthographic Plan

### **Skills (delete)**

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- Dimensioning linear, radial and angular
- Drawing accurately with common drafting tools.
- Following/applying rules
- Lettering
- Mathematical layouts
- Measurement
- Neatness/organization
- Self assessment