



## Career and Technical Education Recommended Math/Science Skills

Successful students in these programs should expect to master these math and/or science skills during their time at the Career Center.

Prior experience and training in these areas are critical for academic success in Career and Technical education.

<b>Allied Health Careers</b>	<ul style="list-style-type: none"> <li>• Chemistry</li> <li>• Fractions, decimals, and percentages</li> <li>• Ratios and proportions</li> <li>• Units and conversions</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> <li>• Biology</li> </ul>
<b>Automotive Technology</b>	<ul style="list-style-type: none"> <li>• Reading a micrometer (digital and gauge)</li> <li>• Fractions, decimals, and percentages</li> <li>• Ratios and proportions</li> <li>• Ohm's Law and Pascal's Law (and the ability to manipulate a formula for different needs)</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> <li>• Metric system</li> <li>• Measurements</li> </ul>
<b>Career Exploratory</b>	<ul style="list-style-type: none"> <li>• Fractions, decimals, and percentages</li> <li>• Ratios and proportions</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> </ul>
<b>Construction Trades</b>	<ul style="list-style-type: none"> <li>• Pythagorean theorem</li> <li>• Fractions, decimals, and percentages</li> <li>• Measuring quickly with tape to an accuracy of 1/8"</li> <li>• Ratios and proportions</li> <li>• Finding area</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> <li>• Ohm's Law</li> <li>• Using industry code charts</li> </ul>
<b>Diversified Agriculture</b>	<ul style="list-style-type: none"> <li>• Fractions, decimals, and percentages</li> <li>• Basic algebra</li> <li>• Scale maps</li> <li>• Polynomial equations</li> <li>• Volume</li> <li>• Ratios and proportions</li> <li>• Metric system</li> <li>• Measurements</li> <li>• Finding area</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> </ul>
<b>Graphic Arts</b>	<ul style="list-style-type: none"> <li>• Measuring</li> <li>• Ratios and proportions</li> <li>• Visual special cognition</li> <li>• Conversion between units, file types</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> <li>• Fractions, decimals, and percentages</li> </ul>
<b>Human Services</b>	<ul style="list-style-type: none"> <li>• Conversions</li> <li>• Financial Literacy</li> <li>• Statistics</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> </ul>
<b>Precision Machining</b>	<ul style="list-style-type: none"> <li>• Measuring</li> <li>• Ratios and proportions</li> <li>• 3D modeling</li> <li>• Reading blueprints</li> <li>• Conversion between units, file types</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> <li>• Fractions, decimals, and percentages</li> </ul>

<b>STEM</b>	<ul style="list-style-type: none"> <li>• Measuring</li> <li>• Ratios and proportions</li> <li>• 3D modeling</li> <li>• Algebra</li> <li>• Conversion between units, file types</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> <li>• Polynomial equations</li> <li>• Fractions, decimals, and percentages</li> </ul>
<b>Viking Cadets</b>	<ul style="list-style-type: none"> <li>• Fractions, decimals, and percentages</li> <li>• Ratios and proportions</li> <li>• Basic math (addition, subtraction, multiplication, division)</li> <li>• Scale maps</li> <li>• Measurements</li> <li>• Use of military time</li> <li>• Metric to standard conversion</li> </ul>