



**Drafting and Design Technology/Technician, General, Classification of Instructional Program (CIP) 15.1301  
Units of Instruction and Task Grid Linked to Pennsylvania Core Standards**

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p><b>100 ORIENTATION.</b></p> <p>101 Demonstrate safety in the drafting room. 102 Demonstrate professionalism.</p>	<p><b>CAREER CLUSTER Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE Design/Pre-construction Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8</p> <p><b>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>KEY IDEAS/DETAILS GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. A</b> <b>Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B</b> <b>Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc. <b>Standard CC.3.5.9-10.C</b> <b>Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. D</b> <b>Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words. <b>Standard CC.3.5.9-10.E</b> <b>Standard CC.3.5.11-12.E</b> Analyze the structure of the relationships among concepts in a text, etc.</p>		

		<p><b>Standard CC.3.5.9-10.F</b>  <b>Standard CC.3.5.11-12.F</b>  Analyze the author’s purpose in providing an explanation, describing a procedure...and  Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G</b>  Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10. H</b>  Assess the reasoning in a text to support the author’s claim for solving a technical problem.  <b>Standard CC.3.5.9-10. I</b>  Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 11-12</b>  <b>Standard CC.3.5.11-12. G</b>  Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.  <b>Standard CC.3.5.11-12. H</b>  Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.  <b>Standard CC.3.5.11-12. I</b>  Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10.J</b>  <b>Standard CC.3.5.11-12.J</b></p>		
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		By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.		
<b>200 INTRODUCTION TO DRAFTING AND DESIGN.</b>				
201 Identify basic board drafting tools and equipment, which are used to produce drawings. 202 RESERVED 203 Demonstrate the knowledge of the basic uses of scales. 204 Demonstrate skill in using Imperial and Metric System of measurement. 205 Identify components of a drawing. 206 Identify and select a letter style appropriate for technical drawings.	<p><b>CAREER CLUSTER</b> <b>Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE</b> <b>Design/Pre-construction Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b> <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. A</b> <b>Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B</b> <b>Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc. <b>Standard CC.3.5.9-10.C</b> <b>Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. D</b> <b>Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words. <b>Standard CC.3.5.9-10.E</b> <b>Standard CC.3.5.11-12.E</b> Analyze the structure of the relationships among concepts in a text, etc. <b>Standard CC.3.5.9-10.F</b> <b>Standard CC.3.5.11-12.F</b> Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.G</b></p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b> <b>Standard 2.2.HS.C.9</b> Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b> <b>Standard 2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard 2.3.HS.A.3</b> Verify and apply geometric theorems as they relate to geometric figures. <b>Standard 2.3.HS.A.13</b></p>	

		<p>Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</p> <p><b>Standard CC.3.5.9-10. H</b> Assess the reasoning in a text to support the author’s claim for solving a technical problem.</p> <p><b>Standard CC.3.5.9-10. I</b> Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12. G</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12. H</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12. I</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.J</b> <b>Standard CC.3.5.11-12.J</b> By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>		Analyze relationships between two dimensional and three dimensional objects.
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<b>300</b>	<b>GEOMETRIC CONSTRUCTION.</b>			
301	Draw to scale.	<b>CAREER CLUSTER</b> <b>Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7	<b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. A</b> <b>Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B</b>	<b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to
302	Draw geometric figures.			
303	Create drawings using geometric construction principles.			

	<p><b>PATHWAYS INCLUDE</b>  <b>Design/Pre-construction Career Pathway</b>  (Choose Standards)  1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b>  <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>Standard CC.3.5.11-12. B</b>  Determine the central ideas or conclusions of a text; etc.  <b>Standard CC.3.5.9-10.C</b>  <b>Standard CC.3.5.11-12.C</b>  Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10. D</b>  <b>Standard CC.3.5.11-12.D</b>  Determine the meaning of symbols, key terms, and other domain specific words.</p> <p><b>Standard CC.3.5.9-10.E</b>  <b>Standard CC.3.5.11-12.E</b>  Analyze the structure of the relationships among concepts in a text, etc.  <b>Standard CC.3.5.9-10.F</b>  <b>Standard CC.3.5.11-12.F</b>  Analyze the author’s purpose in providing an explanation, describing a procedure...and  Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G</b>  Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10. H</b>  Assess the reasoning in a text to support the author’s claim for solving a technical problem.  <b>Standard CC.3.5.9-10. I</b>  Compare and contrast findings presented in a text to those from other sources, etc.</p>	<p>solve real world or mathematical problems.  <b>Standard 2.1.HS.F.4</b>  Use units as a way to understand problems and to guide the solution of multistep problems.  <b>Standard 2.1.HS.F.5</b>  Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.  <b>Standard 2.1.HS.F.6</b>  Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b>  <b>Standard 2.2.HS.C.9</b>  Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b>  <b>Standard 2.3.HS.A.7</b>  Apply trigonometric ratios to solve problems involving right triangles.  <b>Standard 2.3.HS.A.3</b>  Verify and apply geometric theorems as they relate to geometric figures.  <b>Standard 2.3.HS.A.13</b>  Analyze relationships between two dimensional and three dimensional objects.</p>
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401 RESERVED 402 RESERVED 403 RESERVED	<p><b>CAREER CLUSTER</b>  <b>Architecture &amp; Construction Careers</b>  (Choose Standards)  1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE</b>  <b>Design/Pre-construction Career Pathway</b>  (Choose Standards)  1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b>  <b>Refer to the Common Career Technical Core Standards Booklet if you</b></p>	<p><b>KEY IDEAS/DETAILS</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10. A</b>  <b>Standard CC.3.5.11-12 A</b>  Cite specific textual evidence, etc.  <b>Standard CC.3.5.9-10 B</b>  <b>Standard CC.3.5.11-12. B</b>  Determine the central ideas or conclusions of a text; etc.  <b>Standard CC.3.5.9-10.C</b>  <b>Standard CC.3.5.11-12.C</b>  Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10. D</b>  <b>Standard CC.3.5.11-12.D</b></p>	<p><b>TEXT TYPES AND PURPOSE</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.6.9-10.A</b>  <b>Standard CC.3.6.11-12.A</b>  Write arguments focused on discipline specific content.  <b>Standard CC.3.6.9-10.B</b>  <b>Standard CC.3.6.11-12.B</b>  Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.6.9-10.C</b></p>	<p><b>NUMBERS AND OPERATIONS</b>  <b>Standard 2.1.HS.F.2</b>  Apply properties of rational and irrational numbers to solve real world or mathematical problems.  <b>Standard 2.1.HS.F.4</b>  Use units as a way to understand problems and to guide the solution of multistep problems.  <b>Standard 2.1.HS.F.5</b>  Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p>

	<p>wish to add more Pathways, for your local Occupational Area.</p>	<p>Determine the meaning of symbols, key terms, and other domain specific words.</p> <p><b>Standard CC.3.5.9-10.E</b>  <b>Standard CC.3.5.11-12.E</b>  Analyze the structure of the relationships among concepts in a text, etc.</p> <p><b>Standard CC.3.5.9-10.F</b>  <b>Standard CC.3.5.11-12.F</b>  Analyze the author’s purpose in providing an explanation, describing a procedure...and  Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G</b>  Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10. H</b>  Assess the reasoning in a text to support the author’s claim for solving a technical problem.  <b>Standard CC.3.5.9-10. I</b>  Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 11-12</b>  <b>Standard CC.3.5.11-12. G</b>  Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.  <b>Standard CC.3.5.11-12. H</b>  Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.</p>	<p><b>Standard CC.3.6.11-12 C</b>  Produce clear and coherent writing...appropriate to task, purpose, and audience.  <b>Standard CC.3.6.9-10 D</b>  <b>Standard CC.3.6.11-12.D</b>  Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.  <b>Standard CC.3.6.9-10.E</b>  <b>Standard CC.3.6.11-12.E.</b>  Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>RESEARCH</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.6.9-10.F</b>  <b>Standard CC.3.6.11-12.F</b>  Conduct short and more sustained research to answer a question or solve a problem.  <b>Standard CC.3.6.9-10.G.</b>  <b>Standard CC.3.6.11-12.G</b>  Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.  <b>Standard CC.3.6.9-10.H.</b>  <b>Standard CC.3.6.11-12.H.</b>  Draw evidence from informational texts to support analysis, reflection, and research.</p> <p><b>RANGE OF WRITING</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10.I &amp;</b></p>	<p><b>Standard 2.1.HS.F.6</b>  Extend the knowledge of arithmetic operations and apply to complex numbers.</p>
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		<p><b>Standard CC.3.5.11-12. I</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10.J</b> <b>Standard CC.3.5.11-12.J</b> By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>Standard CC.3.5.11-12.I.</b> Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	
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<b>500 FREEHAND DRAWING AND SKETCHING.</b>				
<p>501 Identify and sketch the alphabet of lines. 502 Sketch orthographic views. 503 Sketch an isometric drawing. 504 Develop a perspective drawing using freehand methods. 505 RESERVED 506 RESERVED 507 Express an idea using the sketching process. 508 Create letters and numbers in single stroke capital letters (Gothic) on a technical sketch.</p>	<p><b>CAREER CLUSTER</b> <b>Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE</b> <b>Design/Pre-construction Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b> <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. A</b> <b>Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B</b> <b>Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc. <b>Standard CC.3.5.9-10.C</b> <b>Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. D</b> <b>Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words. <b>Standard CC.3.5.9-10.E</b> <b>Standard CC.3.5.11-12.E</b> Analyze the structure of the relationships among concepts in a text, etc. <b>Standard CC.3.5.9-10.F</b> <b>Standard CC.3.5.11-12.F</b> Analyze the author’s purpose in providing an explanation, describing a procedure...and</p>	<p><b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.A</b> <b>Standard CC.3.6.11-12.A</b> Write arguments focused on discipline specific content. <b>Standard CC.3.6.9-10.B</b> <b>Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.C</b> <b>Standard CC.3.6.11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D</b> Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most</p>	<p><b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>GEOMETRY</b> <b>Standard 2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p>



		<p>Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G</b>  Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10. H</b>  Assess the reasoning in a text to support the author’s claim for solving a technical problem.  <b>Standard CC.3.5.9-10. I</b>  Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 11-12</b>  <b>Standard CC.3.5.11-12. G</b>  Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.  <b>Standard CC.3.5.11-12. H</b>  Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.  <b>Standard CC.3.5.11-12. I</b>  Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10.J</b>  <b>Standard CC.3.5.11-12.J</b>  By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p>significant for a specific purpose and audience.  <b>Standard CC.3.6.9-10.E</b>  <b>Standard CC.3.6.11-12.E.</b>  Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>RESEARCH</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.6.9-10.F</b>  <b>Standard CC.3.6.11-12.F</b>  Conduct short and more sustained research to answer a question or solve a problem.  <b>Standard CC.3.6.9-10.G.</b>  <b>Standard CC.3.6.11-12.G</b>  Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.  <b>Standard CC.3.6.9-10.H.</b>  <b>Standard CC.3.6.11-12.H.</b>  Draw evidence from informational texts to support analysis, reflection, and research.</p> <p><b>RANGE OF WRITING</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10.I &amp; Standard CC.3.5.11-12.I.</b>  Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	
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<p><b>600 INTRODUCTION TO ENGINEERING MATH.</b></p>				
<p>601 Use basic math operations to demonstrate scaling techniques.</p> <p>602 Use basic applied mathematics to solve engineering problems.</p> <p>603 Construct lines using relative, absolute, and polar coordinate systems.</p> <p>604 Establish the relationship among points, lines, and planes in 3-D space.</p> <p>605 Solve descriptive geometry problems.</p>	<p><b>CAREER CLUSTER</b>  <b>Architecture &amp; Construction Careers</b>          (Choose Standards)          1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE</b>  <b>Design/Pre-construction Career Pathway</b>          (Choose Standards)          1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b>  <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>KEY IDEAS/DETAILS</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10. A</b>  <b>Standard CC.3.5.11-12 A</b>          Cite specific textual evidence, etc.  <b>Standard CC.3.5.9-10 B</b>  <b>Standard CC.3.5.11-12. B</b>          Determine the central ideas or conclusions of a text; etc.  <b>Standard CC.3.5.9-10.C</b>  <b>Standard CC.3.5.11-12.C</b>          Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10. D</b>  <b>Standard CC.3.5.11-12.D</b>          Determine the meaning of symbols, key terms, and other domain specific words.  <b>Standard CC.3.5.9-10.E</b>  <b>Standard CC.3.5.11-12.E</b>          Analyze the structure of the relationships among concepts in a text, etc.  <b>Standard CC.3.5.9-10.F</b>  <b>Standard CC.3.5.11-12.F</b>          Analyze the author’s purpose in providing an explanation, describing a procedure...and          Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G</b>          Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10. H</b></p>		<p><b>NUMBERS AND OPERATIONS</b>  <b>Standard 2.1.HS.F.2</b>          Apply properties of rational and irrational numbers to solve real world or mathematical problems.  <b>Standard 2.1.HS.F.4</b>          Use units as a way to understand problems and to guide the solution of multistep problems.  <b>Standard 2.1.HS.F.5</b>          Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.  <b>Standard 2.1.HS.F.6</b>          Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b>  <b>Standard 2.2.HS.C.9</b>          Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b>  <b>Standard 2.3.HS.A.7</b>          Apply trigonometric ratios to solve problems involving right triangles.  <b>Standard 2.3.HS.A.3</b>          Verify and apply geometric theorems as they relate to geometric figures.  <b>Standard 2.3.HS.A.13</b>          Analyze relationships between two dimensional and three dimensional objects.</p>

		<p>Assess the reasoning in a text to support the author’s claim for solving a technical problem.  <b>Standard CC.3.5.9-10. I</b>  Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 11-12</b>  <b>Standard CC.3.5.11-12. G</b>  Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.  <b>Standard CC.3.5.11-12. H</b>  Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.  <b>Standard CC.3.5.11-12. I</b>  Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10.J</b>  <b>Standard CC.3.5.11-12.J</b>  By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>		
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<b>700</b>	<b>INTRODUCTION TO MECHANICAL DRAWING AND DESIGN.</b>				
701	Identify and draw necessary orthographic views.	<b>CAREER CLUSTER</b> <b>Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7  <b>PATHWAYS INCLUDE</b> <b>Design/Pre-construction Career Pathway</b>	<b>KEY IDEAS/DETAILS</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. A</b> <b>Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B</b> <b>Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc. <b>Standard CC.3.5.9-10.C</b>	<b>TEXT TYPES AND PURPOSE</b> <b>GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.A</b> <b>Standard CC.3.6.11-12.A</b> Write arguments focused on discipline specific content. <b>Standard CC.3.6.9-10.B</b> <b>Standard CC.3.6.11-12.B</b>	<b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b>
702	Explain the relationship of orthographic projection to multi-view drawing.				
703	Identify 1st angle and 3rd angle projection.				
704	Identify and draw auxiliary views.				
705	Identify and draw section views.				
706	Identify and draw threads and fasteners.				
707	Create working drawings (assembly, detail drawings, BOM)				
708	Create a title block on a mechanical drawing.				

	<p>(Choose Standards) 1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b> <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. D</b> <b>Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words. <b>Standard CC.3.5.9-10.E</b> <b>Standard CC.3.5.11-12.E</b> Analyze the structure of the relationships among concepts in a text, etc. <b>Standard CC.3.5.9-10.F</b> <b>Standard CC.3.5.11-12.F</b> Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS GRADES 9-10</b> <b>Standard CC.3.5.9-10.G</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10. H</b> Assess the reasoning in a text to support the author’s claim for solving a technical problem. <b>Standard CC.3.5.9-10. I</b> Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS GRADES 11-12</b></p>	<p>Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.C</b> <b>Standard CC.3.6.11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D</b> Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. <b>Standard CC.3.6.9-10.E</b> <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>RESEARCH GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.F</b> <b>Standard CC.3.6.11-12.F</b> Conduct short and more sustained research to answer a question or solve a problem. <b>Standard CC.3.6.9-10.G.</b> <b>Standard CC.3.6.11-12.G</b> Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.</p>	<p>Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b> <b>Standard 2.2.HS.C.9</b> Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b> <b>Standard 2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard 2.3.HS.A.3</b> Verify and apply geometric theorems as they relate to geometric figures. <b>Standard 2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p>
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		<p><b>Standard CC.3.5.11-12. G</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.</p> <p><b>Standard CC.3.5.11-12. H</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.</p> <p><b>Standard CC.3.5.11-12. I</b> Synthesize information from a range of sources into a coherent understanding.</p> <p><b>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J</b> By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.</p>	<p><b>Standard CC.3.6.9-10.H. Standard CC.3.6.11-12.H.</b> Draw evidence from informational texts to support analysis, reflection, and research.</p> <p><b>RANGE OF WRITING GRADES 9-10-11-12 Standard CC.3.5.9-10.I &amp; Standard CC.3.5.11-12.I.</b> Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.</p>	
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<b>800 DIMENSIONING.</b>				
<p>801 Apply measurements, notes, and symbols to a technical drawing.</p> <p>802 Apply ASME Standards for Dimensions, tolerances, and notes.</p> <p>803 Apply ISO Standards for Dimensions and notes.</p> <p>804 Specify dimensions and tolerances using symbols and notes.</p> <p>805 Reverse engineer a drawing from an existing part.</p>	<p><b>CAREER CLUSTER Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE Design/Pre-construction Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8</p> <p><b>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc.</p> <p><b>Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc.</p> <p><b>Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words.</p> <p><b>Standard CC.3.5.9-10.E</b></p>		<p><b>NUMBERS AND OPERATIONS Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p>

		<p><b>Standard CC.3.5.11-12.E</b> Analyze the structure of the relationships among concepts in a text, etc.</p> <p><b>Standard CC.3.5.9-10.F</b> <b>Standard CC.3.5.11-12.F</b> Analyze the author's purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b> <b>GRADES 9-10</b> <b>Standard CC.3.5.9-10.G</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10. H</b> Assess the reasoning in a text to support the author's claim for solving a technical problem. <b>Standard CC.3.5.9-10. I</b> Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b> <b>GRADES 11-12</b> <b>Standard CC.3.5.11-12. G</b> Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem. <b>Standard CC.3.5.11-12. H</b> Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible. <b>Standard CC.3.5.11-12. I</b> Synthesize information from a range of sources into a coherent understanding.</p>		<p><b>ALGEBRA</b> <b>Standard 2.2.HS.C.9</b> Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b> <b>Standard 2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard 2.3.HS.A.3</b> Verify and apply geometric theorems as they relate to geometric figures. <b>Standard 2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p>
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		<b>RANGE OF READING GRADES 9-10-11-12 Standard CC.3.5.9-10.J Standard CC.3.5.11-12.J</b> By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.		
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<b>900 INTRODUCTION TO ARCHITECTURE.</b> 901 RESERVED 902 Construct a floor plan. 903 Construct an elevation. 904 Construct a typical wall section. 905 Draw a pictorial view. 906 RESERVED	<b>CAREER CLUSTER Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7  <b>PATHWAYS INCLUDE Design/Pre-construction Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8  <b>NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b>	<b>KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc. <b>Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.  <b>CRAFT &amp; STRUCTURE GRADES 9-10-11-12 Standard CC.3.5.9-10. D Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words. <b>Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E</b> Analyze the structure of the relationships among concepts in a text, etc. <b>Standard CC.3.5.9-10.F Standard CC.3.5.11-12.F</b> Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.	<b>TEXT TYPES AND PURPOSE GRADES 9-10-11-12 Standard CC.3.6.9-10.A Standard CC.3.6.11-12.A</b> Write arguments focused on discipline specific content. <b>Standard CC.3.6.9-10.B Standard CC.3.6.11-12.B</b> Write informative or explanatory texts, including the narration of technical processes, etc.  <b>PRODUCTION &amp; DISTRIBUTION OF WRITING GRADES 9-10-11-12 Standard CC.3.6.9-10.C Standard CC.3.6.11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D Standard CC.3.6.11-12.D</b> Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. <b>Standard CC.3.6.9-10.E Standard CC.3.6.11-12.E.</b>	
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<b>1000 INTRODUCTION TO CIVIL DRAFTING.</b>				



<p>1001 Construct a site plan.  1002 RESERVED  1003 RESERVED  1004 Read and interpret a deed.  1005 Identify survey and/or GPS equipment.</p>	<p><b>CAREER CLUSTER</b>  <b>Architecture &amp; Construction Careers</b>  (Choose Standards)  1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE</b>  <b>Design/Pre-construction Career Pathway</b>  (Choose Standards)  1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b>  <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>KEY IDEAS/DETAILS</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10. A</b>  <b>Standard CC.3.5.11-12 A</b>  Cite specific textual evidence, etc.  <b>Standard CC.3.5.9-10 B</b>  <b>Standard CC.3.5.11-12. B</b>  Determine the central ideas or conclusions of a text; etc.  <b>Standard CC.3.5.9-10.C</b>  <b>Standard CC.3.5.11-12.C</b>  Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.5.9-10. D</b>  <b>Standard CC.3.5.11-12.D</b>  Determine the meaning of symbols, key terms, and other domain specific words.  <b>Standard CC.3.5.9-10.E</b>  <b>Standard CC.3.5.11-12.E</b>  Analyze the structure of the relationships among concepts in a text, etc.  <b>Standard CC.3.5.9-10.F</b>  <b>Standard CC.3.5.11-12.F</b>  Analyze the author’s purpose in providing an explanation, describing a procedure...and  Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G</b>  Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10. H</b></p>	<p><b>TEXT TYPES AND PURPOSE</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.6.9-10.A</b>  <b>Standard CC.3.6.11-12.A</b>  Write arguments focused on discipline specific content.  <b>Standard CC.3.6.9-10.B</b>  <b>Standard CC.3.6.11-12.B</b>  Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.6.9-10.C</b>  <b>Standard CC.3.6.11-12 C</b>  Produce clear and coherent writing...appropriate to task, purpose, and audience.  <b>Standard CC.3.6.9-10 D</b>  <b>Standard CC.3.6.11-12.D</b>  Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.  <b>Standard CC.3.6.9-10.E</b>  <b>Standard CC.3.6.11-12.E.</b>  Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>RESEARCH</b>  <b>GRADES 9-10-11-12</b>  <b>Standard CC.3.6.9-10.F</b>  <b>Standard CC.3.6.11-12.F</b>  Conduct short and more sustained research to answer</p>	<p><b>NUMBERS AND OPERATIONS</b>  <b>Standard 2.1.HS.F.2</b>  Apply properties of rational and irrational numbers to solve real world or mathematical problems.  <b>Standard 2.1.HS.F.4</b>  Use units as a way to understand problems and to guide the solution of multistep problems.  <b>Standard 2.1.HS.F.5</b>  Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.  <b>Standard 2.1.HS.F.6</b>  Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b>  <b>Standard 2.2.HS.C.9</b>  Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b>  <b>Standard 2.3.HS.A.7</b>  Apply trigonometric ratios to solve problems involving right triangles.  <b>Standard 2.3.HS.A.3</b>  Verify and apply geometric theorems as they relate to geometric figures.  <b>Standard 2.3.HS.A.13</b>  Analyze relationships between two dimensional and three dimensional objects.</p>
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<b>1100 INTRODUCTION TO ELECTRICAL AND ELECTRONIC DRAFTING.</b>				
1101 Identify and describe various symbols. 1102 Create a schematic wiring diagram.	<b>CAREER CLUSTER</b> <b>Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7  <b>PATHWAYS INCLUDE</b> <b>Design/Pre-construction Career Pathway</b>	<b>KEY IDEAS/DETAILS  GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. A</b> <b>Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc. <b>Standard CC.3.5.9-10 B</b> <b>Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc. <b>Standard CC.3.5.9-10.C</b>	<b>TEXT TYPES AND PURPOSE  GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.A</b> <b>Standard CC.3.6.11-12.A</b> Write arguments focused on discipline specific content. <b>Standard CC.3.6.9-10.B</b> <b>Standard CC.3.6.11-12.B</b>	<b>NUMBERS AND OPERATIONS</b> <b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems. <b>Standard 2.1.HS.F.4</b>

	<p>(Choose Standards) 1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b> <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE GRADES 9-10-11-12</b> <b>Standard CC.3.5.9-10. D</b> <b>Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words. <b>Standard CC.3.5.9-10.E</b> <b>Standard CC.3.5.11-12.E</b> Analyze the structure of the relationships among concepts in a text, etc. <b>Standard CC.3.5.9-10.F</b> <b>Standard CC.3.5.11-12.F</b> Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS GRADES 9-10</b> <b>Standard CC.3.5.9-10.G</b> Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart). <b>Standard CC.3.5.9-10. H</b> Assess the reasoning in a text to support the author’s claim for solving a technical problem. <b>Standard CC.3.5.9-10. I</b> Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS GRADES 11-12</b></p>	<p>Write informative or explanatory texts, including the narration of technical processes, etc.</p> <p><b>PRODUCTION &amp; DISTRIBUTION OF WRITING GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.C</b> <b>Standard CC.3.6.11-12 C</b> Produce clear and coherent writing...appropriate to task, purpose, and audience. <b>Standard CC.3.6.9-10 D</b> <b>Standard CC.3.6.11-12.D</b> Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. <b>Standard CC.3.6.9-10.E</b> <b>Standard CC.3.6.11-12.E.</b> Use technology, including the internet, to produce, publish, and update individual or shared writing products.</p> <p><b>RESEARCH GRADES 9-10-11-12</b> <b>Standard CC.3.6.9-10.F</b> <b>Standard CC.3.6.11-12.F</b> Conduct short and more sustained research to answer a question or solve a problem. <b>Standard CC.3.6.9-10.G.</b> <b>Standard CC.3.6.11-12.G</b> Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.</p>	<p>Use units as a way to understand problems and to guide the solution of multistep problems. <b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p> <p><b>ALGEBRA</b> <b>Standard 2.2.HS.C.9</b> Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b> <b>Standard 2.3.HS.A.7</b> Apply trigonometric ratios to solve problems involving right triangles. <b>Standard 2.3.HS.A.3</b> Verify and apply geometric theorems as they relate to geometric figures. <b>Standard 2.3.HS.A.13</b> Analyze relationships between two dimensional and three dimensional objects.</p>
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<b>1200 COMPUTER ASSISTED DRAFTING (CAD).</b>				
<p>1201 Utilize input and output devices such as printers, plotters, etc.</p> <p>1202 Use drawing aids and controls.</p> <p>1203 Use drawing and editing tools.</p> <p>1204 Use viewing tools.</p> <p>1205 Utilize a commercially built drafting library.</p> <p>1206 Produce a custom built drafting library.</p> <p>1207 Make a revision to an existing drawing.</p> <p>1208 Configure and use dimensions and tolerances.</p> <p>1209 Create 3-dimensional models.</p> <p>1210 RESERVED</p> <p>1211 Create parametric solid models.</p> <p>1212 Render a drawing.</p> <p>1213 Import, export, and link drawings.</p> <p>1214 Manage and store files.</p> <p>1215 Use rapid prototyping.</p> <p>1216 Draw, modify, and apply text justifications on a CAD system.</p>	<p><b>CAREER CLUSTER</b> <b>Architecture &amp; Construction Careers</b> (Choose Standards) 1-2-3-4-5-6-7</p> <p><b>PATHWAYS INCLUDE</b> <b>Design/Pre-construction Career Pathway</b> (Choose Standards) 1-2-3-4-5-6-7-8</p> <p><b>NOTE:</b> <b>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local Occupational Area.</b></p>	<p><b>KEY IDEAS/DETAILS GRADES 9-10-11-12</b></p> <p><b>Standard CC.3.5.9-10. A</b> <b>Standard CC.3.5.11-12 A</b> Cite specific textual evidence, etc.</p> <p><b>Standard CC.3.5.9-10 B</b> <b>Standard CC.3.5.11-12. B</b> Determine the central ideas or conclusions of a text; etc.</p> <p><b>Standard CC.3.5.9-10.C</b> <b>Standard CC.3.5.11-12.C</b> Follow precisely a complex multistep procedure, etc.</p> <p><b>CRAFT &amp; STRUCTURE GRADES 9-10-11-12</b></p> <p><b>Standard CC.3.5.9-10. D</b> <b>Standard CC.3.5.11-12.D</b> Determine the meaning of symbols, key terms, and other domain specific words.</p>	<p><b>NUMBERS AND OPERATIONS</b></p> <p><b>Standard 2.1.HS.F.2</b> Apply properties of rational and irrational numbers to solve real world or mathematical problems.</p> <p><b>Standard 2.1.HS.F.4</b> Use units as a way to understand problems and to guide the solution of multistep problems.</p> <p><b>Standard 2.1.HS.F.5</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</p> <p><b>Standard 2.1.HS.F.6</b> Extend the knowledge of arithmetic operations and apply to complex numbers.</p>	

		<p><b>Standard CC.3.5.9-10.E</b>  <b>Standard CC.3.5.11-12.E</b>  Analyze the structure of the relationships among concepts in a text, etc.</p> <p><b>Standard CC.3.5.9-10.F</b>  <b>Standard CC.3.5.11-12.F</b>  Analyze the author's purpose in providing an explanation, describing a procedure...and  Analyze the structure of the relationships among concepts in a text.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 9-10</b>  <b>Standard CC.3.5.9-10.G</b>  Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  <b>Standard CC.3.5.9-10. H</b>  Assess the reasoning in a text to support the author's claim for solving a technical problem.  <b>Standard CC.3.5.9-10. I</b>  Compare and contrast findings presented in a text to those from other sources, etc.</p> <p><b>INTEGRATE KNOWLEDGE &amp; IDEAS</b>  <b>GRADES 11-12</b>  <b>Standard CC.3.5.11-12. G</b>  Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.  <b>Standard CC.3.5.11-12. H</b>  Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.  <b>Standard CC.3.5.11-12. I</b></p>		<p><b>ALGEBRA</b>  <b>Standard 2.2.HS.C.9</b>  Prove the Pythagorean identity and use it to calculate trigonometric ratios.</p> <p><b>GEOMETRY</b>  <b>Standard 2.3.HS.A.7</b>  Apply trigonometric ratios to solve problems involving right triangles.  <b>Standard 2.3.HS.A.3</b>  Verify and apply geometric theorems as they relate to geometric figures.  <b>Standard 2.3.HS.A.13</b>  Analyze relationships between two dimensional and three dimensional objects.</p>
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