

# Lakewood High School Concurrent Enrollment Courses

STEM: X-TREME Engineering		
High School Instructor: Matt Brown Spring Enrollment		
(In cooperation with WarrenTech) Earn RRCC Certificates:		
Coursework completed may be applied toward RRCC Engineering Graphics Technology Associate of Applied Science (AAS) Degrees or the following certificates: <i>Intro to Auto CAD or Engineering Graphics Mechanical.</i>		
Course	Description	Credits
<b>CAD 101</b>  <i>Spring Enrollment</i>	<b>Computer Aided Drafting I</b> <b>High School Instructor: Matt Brown</b>  Focuses on basic computer-aided drafting skills using the latest release of CAD software. The course includes file management, Cartesian coordinate system, drawing set-ups, drawing aids, layer usage, drawing geometric shapes, editing objects, array, text applications, basic dimensioning, and Help access.  <b>Prerequisite: N/A</b>  <b>Plans of Study:</b> This course is part of the Engineering Graphics Technology Associate of Applied Science Degree at Red Rocks Community College and may transfer to other colleges.  <a href="http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm">http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm</a>	3
<b>CAD 102</b>  <i>Spring Enrollment</i>	<b>Computer Aided Drafting II</b> <b>High School Instructor: Matt Brown</b>  Focuses on advanced computer aided drafting skills using the latest release of CAD software. Includes blocks and wblocks, polylines, multilines, polyline editing, advanced editing, editing with grips, hatching, isometric drawings, dimensions and dimension variables, paper space and	3

	<p>viewports, templates, external references, and printing/plotting.</p> <p><b>Prerequisite: CAD 101 or permission from instructor</b></p> <p><b>Plans of Study:</b> This course is part of the Engineering Graphics Technology Associate of Applied Science Degree at Red Rocks Community College and may transfer to other colleges. <a href="http://www.rccc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm">http://www.rccc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm</a></p>	
<p><b>CAD 202</b></p> <p><i>Spring Enrollment</i></p>	<p><b>Computer Aided Drafting 3D</b> <b>High School Instructor: Matt Brown</b></p> <p>Focuses on construction of three-dimensional objects using the latest release of CAD software. Includes mesh modeling, surface modeling, solid modeling, extrusions, Boolean operations, 3D editing, 3D views, rendering, materials and advanced lighting, walkthrough and flyby animations and 3D Solids to 2D Layouts.</p> <p><b>Prerequisites: N/A</b></p> <p><b>Plans of Study:</b> This course is part of the Engineering Graphics Technology Associate of Applied Science Degree at Red Rocks Community College and may transfer to other colleges. <a href="http://www.rccc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm">http://www.rccc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm</a></p>	3
<p><b>CAD 262</b></p> <p><i>Spring Enrollment</i></p>	<p><b>3D Printing</b> <b>High School Instructor: Matt Brown</b></p> <p>Provides the student with the ability to blend the virtual and the real design worlds together through the use of 3D Scanning. 3D CAD Modeling and 3D Printing.</p> <p><b>Prerequisites: N/A</b></p> <p><b>Plans of Study:</b> This course is part of the Engineering Graphics Technology Associate of Applied Science Degree at Red Rocks Community College and may transfer to other colleges.</p>	3

	<a href="http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm">http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm</a>	
<b>CAD 256</b>  <i>Fall and Spring Enrollment</i>	<p><b>SolidWorks Basics</b></p> <p><b>High School Instructor: Eric Halingstad</b></p> <p>Examines the basics of SolidWorks software to produce parametric models.</p> <p><b>Prerequisites: N/A</b></p> <p><b>Plans of study:</b> This course is a part of the Engineering Graphics Technology Associate of Applied Science Degree at Red Rocks Community and may transfer to other colleges.</p> <p><a href="http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm">http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm</a></p>	6
<b>AEC 101</b>  <i>Spring Enrollment</i>	<p><b>Basic Arch. Drafting</b></p> <p><b>High School Instructor: Matt Brown</b></p> <p>Introduces the student to basic architectural drafting techniques. Topics explored in lecture and through project work include: use of instruments; geometric construction; multiview, oblique and isometric projections; and basic construction drawings.</p> <p><b>Prerequisite: CAD 102 or permission of instructor.</b></p> <p><b>Plans of Study:</b> This course is part of the Engineering Graphics Technology Associate of Applied Science Degree at Red Rocks Community College and may transfer to other colleges.</p> <p><a href="http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm">http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm</a></p>	4
<b>AEC 102</b>  <i>Spring Enrollment</i>	<p><b>Residential Construction Draw</b></p> <p><b>High School Instructor: Matt Brown</b></p> <p>Investigates light-frame construction techniques and the production of residential construction drawings. The course covers residential construction materials, components, and systems related to wood-frame structures. Students produce a professional set of construction drawings</p>	4

	<p>of a residential structure.</p> <p><b>Prerequisite: AEC 101 or permission of instructor.</b></p> <p><b>Plans of Study:</b> This course is part of the Engineering Graphics Technology Associate of Applied Science Degree at Red Rocks Community College and may transfer to other colleges. <a href="http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm">http://www.rcc.edu/catalogs/17-18/engineering-graphics-technology-degrees.htm</a></p>	
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