

# RCAS Cluster Plan of Study:

## ARCHITECTURE AND CONSTRUCTION

Careers in designing, planning, managing, building and maintaining the built environment.

<p><b>Activities that describe what I like to do:</b></p> <ul style="list-style-type: none"> <li>• Read and follow blueprints and/or instructions</li> <li>• Picture in my mind what a finished product looks like</li> <li>• Work with my hands</li> <li>• Perform work that requires precise results</li> <li>• Solve technical problems</li> <li>• Visit and learn from beautiful, historic, or interesting buildings</li> <li>• Follow logical, step-by-step procedures</li> </ul>	<p><b>Personal qualities that describe me:</b></p> <ul style="list-style-type: none"> <li>• Curious</li> <li>• Good at following directions</li> <li>• Pay attention to detail</li> <li>• Good at visualizing possibilities</li> <li>• Patient and persistent</li> </ul>	
<p><b>9<sup>th</sup> Grade Required Core Courses:</b></p> <ul style="list-style-type: none"> <li>• English 9</li> <li>• Integrated Math 1</li> <li>• Physical Science 1 &amp; 2 or Biology 1 &amp; 2</li> <li>• World Geography</li> </ul> <p><b>10<sup>th</sup> Grade Required Core Courses:</b></p> <ul style="list-style-type: none"> <li>• English 10 / Adv. English 10</li> <li>• Integrated Math 2</li> <li>• Any Physical Science, Biology 1 &amp; 2</li> <li>• World History</li> </ul> <p><b>11<sup>th</sup> Grade Required Core Courses:</b></p> <ul style="list-style-type: none"> <li>• English 11 / Adv. English 11 / AP English 11</li> <li>• Integrated Math 3</li> <li>• Chemistry or Physics</li> <li>• U.S. History 1, 2, 3</li> </ul> <p><b>12<sup>th</sup> Grade Required Core Courses:</b></p> <ul style="list-style-type: none"> <li>• English 12 / AP English 12</li> <li>• Integrated Math 3</li> <li>• U.S. Government</li> </ul> <p><b>Other Required Courses:</b></p> <ul style="list-style-type: none"> <li>• Information Technology (1 credit)</li> <li>• Fine Arts (1 credit)</li> <li>• Physical Education / Health (1 credit)</li> <li>• Economics or Personal Finance (.5 credit)</li> <li>• World Language, Capstone Experience or Service Learning, or Approved Career and Technical Education (1 credit)</li> </ul>	<p><b>Recommended Cluster Electives:</b></p> <ul style="list-style-type: none"> <li>• Introduction to Technology Education</li> <li>• Computer-Aided Design (CAD)</li> <li>• Ecology / Lab (CHS)</li> <li>• Computer Applications</li> <li>• Geometry in Construction</li> </ul> <p><b>Other Recommended Electives:</b></p> <ul style="list-style-type: none"> <li>• Art 9 (2-Dimensional)</li> <li>• Art 9 (3-Dimensional)</li> <li>• Basic Drawing &amp; Design</li> <li>• Photography</li> <li>• Technical Writing</li> <li>• Geology: Special Topics in Earth Science / Lab (CHS)</li> <li>• Physics / Lab</li> <li>• AP Physics 1 &amp; 2 / Lab</li> <li>• Earth Science 2 / Lab (RCHS / SHS)</li> </ul>	<p><b>Careers in this Cluster:</b></p> <p>Architect Carpenter Plumber Architectural Engineer Contractor Civil Engineer</p> <p><b>Post-Secondary Programs in this Cluster:</b></p> <p><u>Technical Degree*:</u> Building Trades</p> <p><u>Associates Degree:</u> HVAC Electrical Plumbing</p> <p><u>Baccalaureate Degree:</u> Civil Engineering Construction Science</p> <p><u>Advanced Degree:</u> Civil Engineering Architectural Engineering</p> <p><i>*See Western Dakota Tech (WDT) Dual Enrollment for more information.</i></p>
<p align="center"><b>Interest, Aptitude and Achievement Inventories</b></p> <p><b>Career Matchmaker</b> (8<sup>th</sup>-12<sup>th</sup> grade); <b>Ability Profiler</b> (10<sup>th</sup> grade); <b>PLAN</b> (10<sup>th</sup> grade); <b>Learning Styles Inventory</b> (10<sup>th</sup> – 11<sup>th</sup> grade); <b>My Skills</b> (10<sup>th</sup> – 12<sup>th</sup> grade); <b>Armed Services Vocational Aptitude Battery – ASVAB</b> (11<sup>th</sup> &amp; 12<sup>th</sup> grade); <b>PSAT</b> (11<sup>th</sup> grade); <b>ACT</b> or <b>SAT</b> (11<sup>th</sup> – 12<sup>th</sup> grade)</p>		