

2024-2025

Rapid City Stevens High School

CADD

RCAS Policies/Procedures:

Students will be required to follow all RCAS policies and procedures. To view the RCAS High School Student Handbook, click handbook.

Course Description:

Do you enjoy technical design and computers? Are you interested in developing real-world plans and ideas? In this course, students will develop the fundamental skills necessary to create 2D and 3D drawings and models using CADD software. Students will create a variety of detailed plans and parts that are related to real world projects. Integration of modern industry equipment will be used to build projects based on CADD models.

Textbook:

None

Required Resources:

Computer Aided Drafting Programs

"Limited Choice" Resources: (students will be asked to choose at least one title from this list)

Student Choice:

Will student be asked to choose additional reading material from the classroom or school library?

No

Essential Questions:

What tools do you think you need for drafting? Why is it essential to know how to measure? Why do we scale? When would I use the different drafting scales? How do we make a building and landmass fit on a piece of paper? What is the purpose of practicing writing block letters and numbers? Why should there be a standard way to write and draw letters and numerals? What is the proper drawing to use when? How do we represent a 3D object on a 2D surface/drawing? What are ways we can evaluate what we built? Why is it valuable to evaluate working drawings before building them? What career paths are available with these skill sets?

Essential Learning Intentions:

- DDI 1 Examine basic drafting terminology and equipment.
- DDI 2 Apply basic math skills to design work.
- DDI 3 Examine basic drafting fundamental and technical skills
- DDI 4 Apply drawing techniques to produce various technical plans.
- DDI 5 Implement computer aided software into design work.
- DDI 6 Explore career-ready practices.