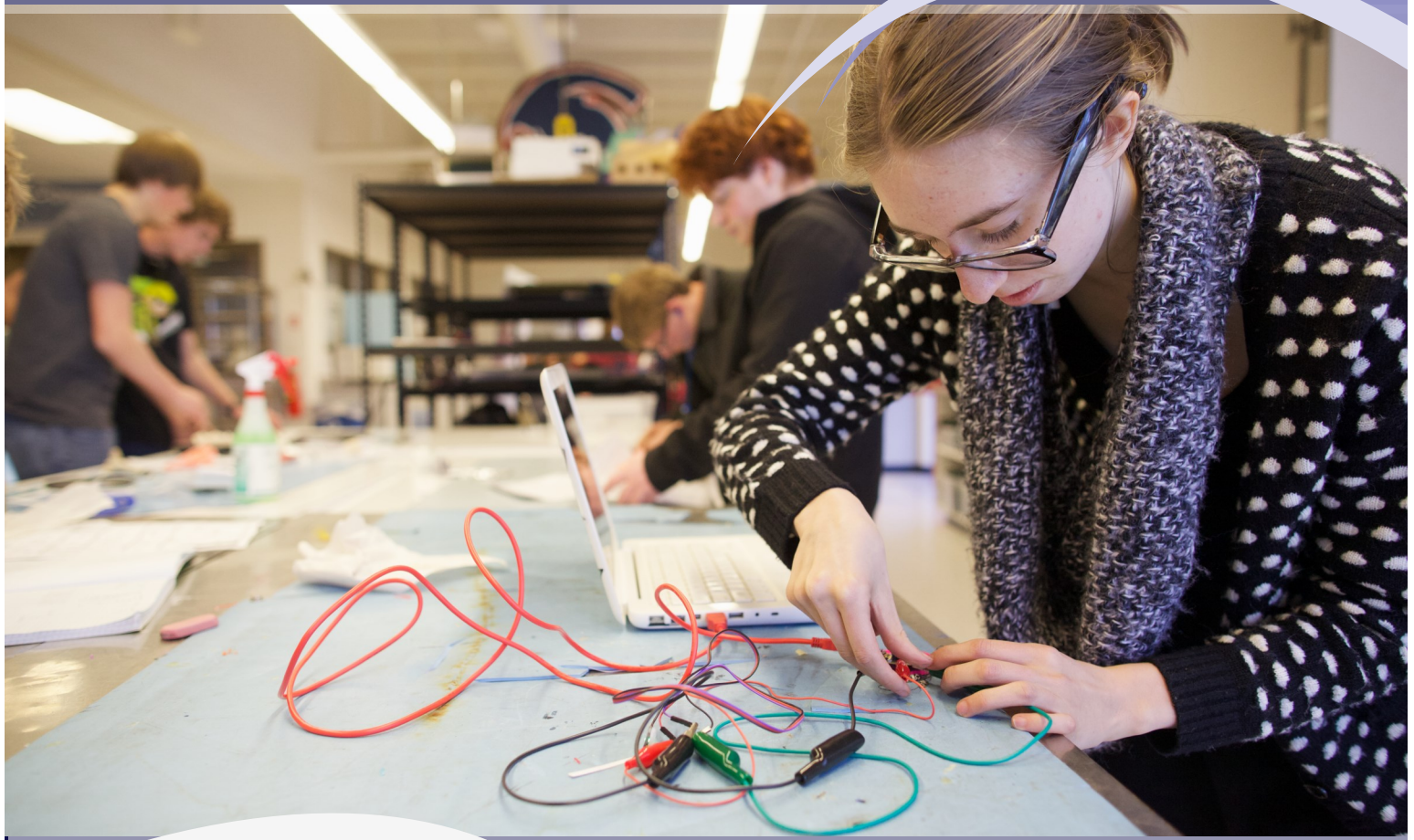


CENTAURUS ENGINEERING



Centaurus Engineering prepares high school students to succeed in today's economy. Students solve real world engineering problems in a creative, collaborative, and project-based environment.

Centaurus High School

STUDENTS...

Half of the freshman class at Centaurus are in the engineering program. Throughout their four years in the program, engineering students take advantage of various opportunities to connect with industry and academic partners through one-on-one classroom interactions, joint design projects, science fairs and expositions, and internship opportunities in the engineering field. Students in the engineering program are valued members of their school community, involved in the arts, athletics, and various clubs.



FRESHMAN YEAR

Choose from two yearlong courses your freshman year:

- ◆ Introduction to Engineering Design
- ◆ AP Computer Science Principles
- ◆ Computer Programming Basic

SOPHOMORE, JUNIOR, AND SENIOR YEARS

Customize your high school experience with these yearlong engineering courses:

- ◆ Design & Manufacturing
- ◆ Aerospace Engineering
- ◆ Biotechnical Engineering
- ◆ Civil Engineering & Architecture
- ◆ IB/AP Computer Science (SL/HL)
- ◆ IB Design Technology
- ◆ Engineering Design & Development

Many engineering seniors are accepted to major four-year university engineering programs. Through a partnership with University of Colorado, Boulder, seniors are eligible for guaranteed admission to the College of Engineering & Applied Science.

PROJECTS...

Explore CAD modeling using SolidWorks and Autodesk Inventor. Create design prototypes using the 3D printers and the laser cutter. Test lift and drag properties of airfoils at high speeds in the wind tunnel. Perform stress analysis tests for structural integrity. Program a robotic arm. Run the mill to manufacture small parts. Write G&M code to run the milling machine. Use VEX robotics equipment to design and build automated robots. Learn Python and Java. Use Arduino circuitry to build electronics. Build custom robotic surgical devices. Grow and harvest fluorescent proteins.

