# Why Career Technical Education (CTE)?

Career Technical Education
provides students with
opportunities to **experience** and
develop real-world skills within
our education system that
prepares them for success in postsecondary options.



### MECHANICAL ENGINEERS INTERESTS

Investigative Realistic Conventional

**Explore** your interests through the Interest Inventory survey in Naviance.

#### More Info?

sanjuan.edu/collegecareerready

#### Contact

Department of
College & Career Readiness
7322 Sunrise Blvd.
Citrus Heights, CA 95610
(916) 971-7163

The San Juan Unified School District Board of Education is committed to equal opportunity for all individuals in district programs and activities. District programs, activities and services shall be free from unlawful discrimination, harassment (including sexual harassment), intimidation, and/or bullying based on actual or perceived characteristics of race or ethnicity, color, ancestry, nationality, national origin, immigration status, ethnic group identification, age, religion, marital or parental status, pregnancy, physical or mental disability, sex, sexual orientation, gender, gender identity, gender expression, genetic information, affiliation with the Boy Scouts of America, or on the basis of a person's association with a person or group with one or more of these actual or perceived characteristics. If you believe you have experienced unlawful discrimination, please contact: Equity Compliance Officer, Fhanysha C. Gaddis, (916) 971-7110, LegalServices@sanjuan.edu; Title IX Coordinator, Katie Fabel, (916) 971-7110, TitleIX@sanjuan.edu; Section 504 Coordinator, Dominic Covello, (916) 971-7220; ADA/Title II Coordinator, Michelle Fischer, (916) 971-7036

# Robotics Pathway

### College & Career Readiness

San Juan Unified School District

Rio Americano High School





#### **Robotics**

The Robotics pathway teaches students the basics of electricity and electronics. Students will learn to model in 3D. program parts and build a product. Students will become proficient with automated manufacturing and further refine/develop skills in milling, turning and welding. They will also learn how to make circuits and diagnose problems. Students move on to electronics and learn how computers are taken apart and repaired as well as how they work. This course competes in the NASA Robotics competition called FRC or First Robotics Competition. Our robot teams compete in this highly competitive and advanced robot challenge against other high schools from across the state and country.







Intro to Eng Design

Manufacturing

Technology

(Meets UC/CSU

"F" Requirement)

Engineering
Design
Manufacturing
Technology
(Meets UC/CSU
"G" Requirement)

2

#### Robotics

(Meets UC/CSU "D" Requirement)

3



## Equipment & Training

- AutoCAD
- Fusion 360
- Welders
- Millers
- Lathes
- Hand Tools



#### UC/CSU A-G Requirements

 All three courses in this pathway are A-G and fulfill graduation requirements



- · Local Manufacturing Companies
- State of California Manufacturing Workers
- ARC Welding & Manufacturing
- Private Consultants



#### **Career Outlook**

**Mechanical Engineers** 

- Annual median wage is \$95,300
- Employment growth is at 2% (slower than average)

U.S. Department of Labor, Bureau of Labor Statistics, (May, 2021).