

MACHINING

ONE YEAR CERTIFICATE PROGRAM FOR SVUSD JUNIORS & SENIORS



Simi Institute for Careers & Education is proud to offer a Machining certificate program for incoming SVUSD juniors and seniors. This one year program is comprised of two semesters taken in succession. The first semester (Intermediate Machining) focuses on traditional machine tool technologies including set-up and operation of the engine lathe, milling machine, drill press, and sawing and cutoff machines. The second semester (Advanced Machining) explores the Computer Numerical Controlled (CNC) machine tools, their operations, as well as programming features.

Upon successful completion of this program, students will earn a Basic CNC Mill Operator certificate from Haas Automation, Inc. *See reverse side for more information.*

INTEREST FORM



tinyurl.com/3rzu9hu6

PROGRAM DETAILS

Semester 1 (Grades 11, 12): Intermediate Machining

Semester 2 (Grades 11, 12): Advanced Machining

High School Credits: 10 credits per semester

College Preparatory Elective: G

CTE Pathway: Manufacturing and Product Development: Machining (212)

SCHEDULE

Program Length: 1 year (2 semesters)

Days: Monday - Thursday

Time: 3:00 pm - 4:15 pm

Location: Simi Institute Campus

1880 Blackstock Avenue, Simi Valley, CA 93065

Prerequisites: Must entering 11th or 12th grade at an SVUSD high school and have their own reliable transportation

PLEASE NOTE

Regular attendance is mandatory. This may interfere with sports or other extracurricular activity scheduling. This course follows Simi Institute's school calendar which may differ from that of your high school.

KEY CHARACTERISTICS & SKILLS OF AN IDEAL MACHINING STUDENT

Hands-on and Mechanically Inclined: A student who enjoys working with tools, building things, and understanding how mechanical systems operate will thrive in this environment.

Attention to Detail: Precision is paramount in a machine shop, where measurements must often be accurate to a few thousandths of an inch. A successful student is meticulous, patient, and aims for perfection in their work.

Problem-Solving Skills: Machining involves a lot of critical thinking, troubleshooting unexpected issues, and figuring out the most efficient way to turn raw material into a final product based on a print.

Strong Math and Computer Skills: Foundational knowledge of algebra, trigonometry, and geometry is essential for calculating measurements and programming computer numerical control (CNC) machines.

Good Work Ethic and Organization: The process involves multiple steps and managing several tasks at once, requiring good time management, organization, and discipline.

Communication and Teamwork: While much of the work can be independent, the shop environment often requires collaboration with instructors and peers to discuss ideas and troubleshoot projects effectively.

Safety Conscious: A good student understands and strictly follows safety precautions, recognizing the importance of a safe work environment. There is nothing we take as seriously as safety in our class. Following safe shop practices is one of our few non-negotiables in the Machine Technology program.

The ideal student is a curious and dedicated individual who enjoys seeing a project through, from a print to a physical, high-precision part.