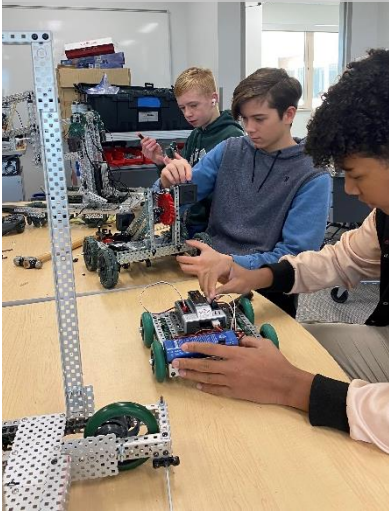


# ROBOTICS 1 & 2



Robotics 1 & 2 is a course that combines programming, electronics, mechanics, and engineering principles. Students will learn how to design, build, program, and control robotic devices. Students will identify and use electronic components, sensors, and actuators. Microcontrollers are used with these components to create mechanisms to perform specific tasks. Professional robots from Yamaha, Fanuc, and Universal Robotics are used to give students a real-world experience of what it is like to program an industrial robot arm. Students are encouraged to take part in extracurricular robotics activities such as VEX and TSA competitions.

## Topics Covered

- Electronics
- Programming
- Mechanisms
- Micro Controllers
- Industrial Robot arms
- CNC control
- 3D Printing

## Career Paths

- Robotics Operator
- Robotics Technician
- Robotics Programmer
- Electrical Engineer
- Mechanical Engineer
- Manufacturing Engineer



**To Register**, submit a GTI Application (signed by parent).

Visit the GTI website or contact your school counselor for an application.

***This course offers college credit through SUU***

*Granite School District does not discriminate on the basis of race, color, sex, pregnancy, religion, national origin, marital status, disability, sexual orientation, gender identity, age, or any other legally protected classification in educational programs, activities, or access to facilities.*

## Location

Granite Technical Institute  
2500 S. State St.

## Transportation

School bus available to & from GTI

## Grade Level

9<sup>th</sup>- 12<sup>th</sup> grades

## Pre-Requisites

Engineering Principles 1 & 2 or  
Computer Programming

## Class Times

2-period Block

## Credits

1.0 CTE, Elective, or College Credit  
available SUU (EET 1600)

## Length

Semester

## Fees

Lab fees required.

Fee waivers available for qualifying  
students at their home high school.

