# <u>Warren T. Eich Middle School</u>

# Electricity, Electronics, and Robotics

# Student Application

Electricity, Electronics, and Robotics is a technical-skills based class that delves into the world of electricity. Students will begin the class studying the basic concepts of electricity. Circuit theory, circuit design, and troubleshooting will be covered. The class will then move into basic electronic components, and theory. Students will build their own circuits and practice soldering. Robotics will be the last part of the class and will include basic programming theory and application.  Students will utilize their programming and circuit knowledge to operate robots autonomously, navigating them through several obstacle courses. Students will be working with the community on multiple occasions, leveraging their technical skills to solve problems. They are expected to demonstrate the professional behavior we foster in our IB students.

There will be group and individual projects.  Students will be expected to participate in Energy Auditing project we do in partnership with SMUD, and other local businesses.

This is a yearlong course.  Students are placed in this class with instructor approval.

To apply for this course students will be required to complete the following:

1) **Student Application for Electricity, Electronics, and Robotics:**
   Students need to answer the following questions on the back of this document. This form needs to be returned to Mr. Agostinelli, or the office, by **Friday April 12, 2019.**

2) **Teacher Recommendation Form for Yearlong Electives for VAPA Courses:**
   This form can be obtained from Mr. Agostinelli, or the office.  The teacher recommendation needs to be completed electronically by **Friday April 12, 2019.**

3) **Attend Electricity, Electronics, and Robotics performance assessment tryouts:**
   Tryouts will be held the week after Spring Break during lunch time in the wood shop (D7).

### Application Deadline:  Friday April 12, 2019

If you have any questions, please contact John Agostinelli at jagostinelli@rcsdk8.org

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Print Name : _____

Please answer the following questions as honestly, and thoroughly as possible.  You may either print your answers below or type your responses on a separate piece of paper (staple it to this sheet).

1) What previous experience do you have with electricity, electronics, or robotics?

2) Why do you want to take Electricity, Electronics, and Robotics?

3) If selected for this course, what will you contribute to this class?

4) Students will frequently be working in groups or as individuals to complete projects. Please explain how you would work as a group or an individual to complete a project on time.