

## Robotics Classes

**Robotics 1** is a broad-based, hands-on robotics experience. Students will explore principles of Robotics, Automation and Programming through the fabrication of a fully sensor-integrated robot to solve real and virtual world challenges. In addition, students will develop autonomous coding and manual controls skills.

**Robotics 2** is in depth Project Based Learning (PBL). Using the Engineering Design Process, student teams will Create, Build, Test, Evaluate and Optimize a Robot of their own design to successfully compete in the VEX World Robotics Challenge as members of the award winning "Porta-Botz!" team.

*The VEX "Claw-bot", complete with full sensor integration, is used in Robotics 1 to develop student's skills.*



## Automation, Robotics & Manufacturing Pathways

### Engineering & Technology Education (ETE)

- Robotics 1 (1 semester)
- Robotics 2 (1 year)
- Intro to Manufacturing 1 (1 semester)
- Intro to Manufacturing 2 (1 semester)

### Project Lead the Way (PLTW)

- Introduction to Engineering & Design-IED
- Principles of Engineering-POE
- Computer Integrated Manufacturing-CIM

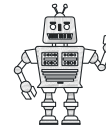
## Portage HS Robotics



### Portage HS Robotics Contact Information:

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- \* Robotics Instructor & Coach
- \* Project Lead the Way (PLTW) Coordinator
- \* Engineering & Technology Department Chair



## "Like" us on Facebook!

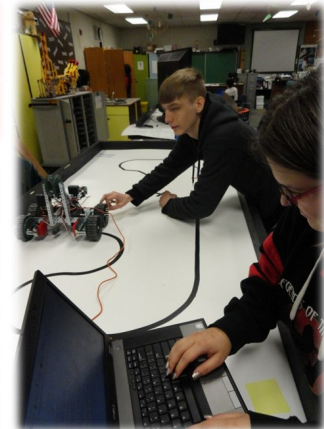
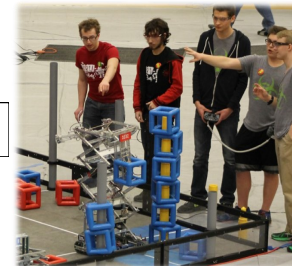
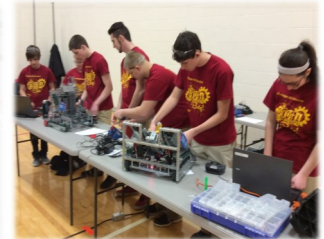


<https://www.facebook.com/PortaBotz2567>

## Portage HS Robotics



## Student Information

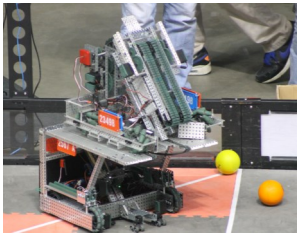


**Get Your Geek On!**



# We Want YOU!

Robotics classes and the competitive VEX team are open to all high school students grade 9-12. Opportunities exist in Design, Fabrication, Data & Statistics, Documentation, Programming, Marketing, Scouting, Strategy and Driving. Students also develop their skills as effective communicators, problem solvers, leaders, team players, and most importantly, have fun!



## Expectations of Excellence

- ⇒ Travel to Weekend Competitions.
- ⇒ After School Practices & Build Sessions.
- ⇒ Meet Project Deadlines.
- ⇒ Defend Project to Engineering Panel.
- ⇒ Participate in Fundraising efforts.
- ⇒ Volunteer in the Community.
- ⇒ A team-over-self attitude.
- ⇒ Embrace failure to ultimately succeed

# VEX ROBOTICS TEAM

Known as the “Porta-Botz!”, Portage High School fields several competitive teams who engineer solutions to the VEX Robotics World Challenge. The award winning program is comprised of individuals, each with unique talents, who come together to achieve excellence. The team competes in local, state, national and world-level tournaments and are ambassadors of the Portage community. There are numerous opportunities for students to contribute to the team’s success.

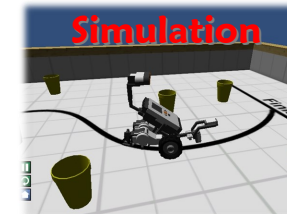
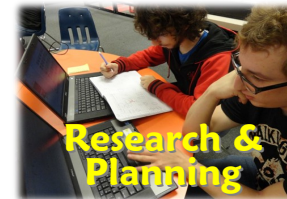
## Award Winning

### In just 2 years of action:

- ⇒ VEX World Championships Qualifiers
- ⇒ World “Create” Award Winners
- ⇒ US Open Robotics National Champions
- ⇒ Indiana’s State Runner-Up
- ⇒ Indiana’s State Design Award Winners
- ⇒ Multiple Tournament Championships
- ⇒ Excellence Award Recipients
- ⇒ Judges Award Winners
- ⇒ Design Award Winners



# What We Do



Next Stop for the “Porta-Botz!”:  
VEX World Robotics Championships!



# ENGINEERING & TECHNOLOGY EDUCATION