

Curriculum Areas

The Mechatronics Program follows the statewide Program of Study for Electromechanical Technology/ Electromechanical Engineering Technology. Major units of study include: Lab Safety, Blueprint Reading, Electrical Systems, Electronics, Robotics, Mechanical Systems, Fluid Power Systems, Programmable Logic Controllers (PLCs), Control System

Student Experiences

The Mechatronics Program blends theory and practical experiences to provide authentic learning experiences.

- Design and build robotic devices
- Diagnose and repair sophisticated automated equipment
- Communicate using machine language

How to Enroll

Mechatronics is approved as a four-year program at Upper Bucks County Technical School. Students in grades 9-12 from Palisades, Pennridge and Quakertown school districts may enroll in this program through their participating school district's guidance office.

About the Upper Bucks County Technical School

Upper Bucks County Technical School (UBCTS) is a career and technology center serving students in grades 9-12 from Palisades, Pennridge, and Quakertown School Districts.

UBCTS is jointly owned and operated by the Palisades, Pennridge, and Quakertown school districts; there is no tuition cost for students to participate from these districts.

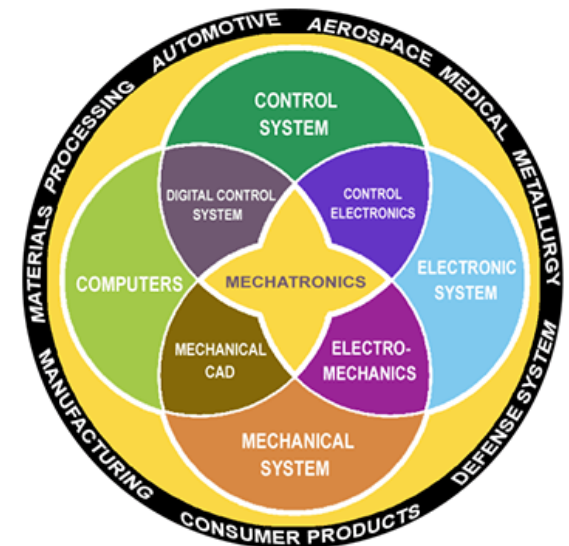
Mechatronics

The Mechatronics program offered at UBCTS provides a holistic approach to understanding the physics of automated work. Mechatronics focuses on machines that are controlled by programmable logic and powered by various forms of energy, such as electricity or pressurized fluids such as air (pneumatic) and oil (hydraulic). Mechatronics workers design, troubleshoot, maintain and repair sophisticated automated equipment.



Students will perform activities and obtain fundamental knowledge in the following areas: electrical, electronics, robotics, mechanical systems, fluid power systems, programmable logic controllers, and other control systems. Engineers and technicians trained in Mechatronics enjoy almost unlimited mobility across technical disciplines.

The Mission of the Upper Bucks County Technical School is to educate students for successful careers and to inspire lifelong learning in a challenging and changing global economy.



Mechatronics crosses multiple fields of study and numerous industry clusters.