



MECHATRONICS A & B

Grant County Schools Career and Technology Center

The name Mechatronics stems from mechanical and electronics and is a relatively new approach to product design and development, merging the principles of electrical, mechanical, computer and industrial engineering. It addresses the four interconnected disciplines used for all complex modern devices. Mechatronic systems are typically composed of traditional mechanical and electrical components but are referred to as "smart" devices or systems because of the incorporation of sensors, actuators and computer control systems. Over the years, the term "mechatronics" has come to mean the integrated methodology for designing products that exhibit fast, precise performance.

Mechatronics is an emerging field of engineering that integrates electrical engineering, mechanical engineering, computer science, control engineering and information technology. In layman's terms, mechatronics combines these areas of engineering to allow the design, development and application of "smart devices" in an integrated, cross-disciplinary manner. The mechatronics concept establishes basic principles for a contemporary engineering design methodology. In this methodology, engineering products and processes have components that require manipulation and control of dynamic (moving) constructions to the required high degree of accuracy. Also, the design process requires integrating enabling technologies such as information technology and control engineering. A key factor for the design process involves integrating modern microelectronics and the engineering of software into mechanical and electromechanical systems

Course Details:

- Each class is limited to 14 students, with a class minimum of 10.
- This class is offered at the following location:
 - Grant County Schools Career and Technology Center (GCS CTC)
 - on the Grant County High School campus
 - 715 Warsaw Road
 - Dry Ridge, KY 41035
 - (859) 824-9739
- Class Schedule:
 - Mechatronics A and Mechatronics B are each 90-hour training programs
 - Classes will be held Tuesday and Thursday evenings, 5:00 – 8:00 p.m.
 - Classes for Mechatronics A will be: September 30, 2014 – January 20, 2015
 - Registration Deadline: September 16, 2014
 - Classes for Mechatronics B: To be Announced
- Instructor: Brad Schadler
- Registration may be completed via one of the following:

- Online (<http://grant.kyschools.us/>), or
- Registration forms are available to be picked up at:
 - Grant County Board of Education office (M-F, 7:30am-4:30pm)
820 Arnie Risen Blvd, Williamstown, KY 41097 – (859) 824-3323
 - Grant County Career Advancement Center – (859) 813-8124
2020 Taft Highway, Dry Ridge, KY 41035 (By Appointment)

➤ Cost: Mechatronics A: \$450.00 / Mechatronics B: \$450.00

Payment is due upon registration. Checks may be made payable to Grant County Schools.

Certain candidates may be qualified for assistance with tuition via the Workforce Investment Act (WIA). For additional information about WIA, please contact Katrina Harris-Greene at the Grant County Career Advancement Center (address above). If payment is made by a third party, then acceptable documentation must be presented at enrollment. The third party will be billed as soon as you are enrolled in class.

Cost of class includes:

- Workbook and Use of Textbook
- Insurance
- Exam and Certification Fee

Refund Policy: Payment is due upon registration. If a student chooses to withdraw from a class, a refund (minus \$55.00 for administrative costs already incurred) is available ONLY if the withdrawal is at least one full week before the start of class. Withdrawal after this deadline will result in NO REFUND.