CENTRAL HIGH SCHOOL

The Institute of Advanced Manufacturing and Mechatronics

Mechatronics professionals are the technicians and engineers who design and maintain automated robotic equipment. Technicians and engineers conduct their work in laboratories, offices or on-site at manufacturing plants. While technicians primarily maintain machinery, engineers are more concerned with the design and development of components and products.

Pathway:

- Advanced Manufacturing
- Mechatronics

Future Ready Institutes Highlights:

- * Small Learning Communities Students will be a member of a smaller learning community, or "school within a school" containing students all with similar career interests.
- ★ Engaging Learning Opportunities Students will be engaged in project based learning opportunities, hands on learning as well as instruction with real world connections around the career theme.
- ★ Business and Community Partnerships Institutes will be connected to local business and community partners. These partnerships will allow for opportunities for students to learn from successful career professionals.
- ★ Post-Secondary Jumpstart The institute will allow for students to obtain dual credit and dual enrollment opportunities. Also, students will have the opportunity to earn work ready credentials to give them an advantage for life after high school.
- ★ Dual enrollment opportunities from Chattanooga State
 - * ET112-Mathematics for Engineering Technology (3)
 - * MN 116- Industrial Safety (3)
 - * MD 184- Manufacturing Processes (3)
- Industry Certification opportunities
- *Measurement, Materials, and Safety Certification (NIMS) * Snap On Precision Measurement Instruments Certification * FANUK Certification
- ★ CAREERS INCLUDE but not limited to-
 - * Design Engineers
 - * Electronic/Mechatronic Technicians
 - * Automated Control Engineer
 - * Mechatronic Engineer Internships
 - * Entry Level Robotic Engineers
 - * Assembly Technicians

- * MN 104 Blueprint Reading and Analysis (3)
- * Or CT 124- Process Control and Instrumentation 1 (3)
- * Robotic Manufacturing Engineer
- * Automation/Robotic Controls Engineer
- * Electronic and Mechatronic Instructors
- * Electrical Engineers
- * Junior Mechanical Engineer
- * Robotic Technician

Sample Student Schedule (with Program of Study in Block Schedule)

<u>Freshman Year</u> Algebra I Physical World Concepts World History English 9 Level I & 2 class in POS Wellness or JROTC 1

Junior Year Algebra II Chemistry or Physics US History English 11 Foreign Language 2 Level 3 class in POS <u>Sophomore Year</u> Geometry Biology Fine Art (Music History or Art 1) English 1 Level 3 & 4 class in POS Foreign Language

Senior Year

Bridge Math Forensics/4th Science English 12 WBL - 2 credits Govt./Economics Personal Finance/ Industry Cert.

www.chs.hcde.org 423.344.1447 **Contact Us**

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