



Magnet High School for Science, Mathematics, and Technology

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Middle States Association of Colleges and Secondary Schools Accredited
2004, 2013 National Blue Ribbon School

MISSION STATEMENT: The Union County Magnet High School for Science, Mathematics, and Technology prepares students of Union County to become self-directed, responsible, and productive individuals to succeed in our rapidly changing modern world. Our engineering-based specialized career academy emphasizes critical thinking, problem solving, and leadership skills through a rigorous project-based curriculum. Through the support and collaborative effort of stakeholders within the school community, Magnet High School offers students a diverse and forward-thinking learning experience that fosters a sense of creativity and ingenuity while remaining true to its core ethos of engineering. It is our goal to provide students with the most advanced career and technical education course of study in conjunction with rigorous academics needed to be both college and career ready. In pursuit of that goal, the Magnet High School community inspires students to be productive members of society, adept at offering ethical and dynamic solutions to continuously resolve human and societal challenges.

Magnet High School Career & Technical Education Course Sequence	
Grade 9	Technology & Design
Grade 10	Introduction to Engineering & Digital Modeling
Grade 11	Introduction to Programming, Advanced Manufacturing & Project Management
Grade 12	Human Factors Engineering
Career & Technical Education Electives	Aerospace Engineering, Biochemistry, Architectural Design, Civil Engineering Design, Electrical Engineering Concepts, Engineering Design Capstone, Engineering Ethics, Environmental Engineering, Fundamentals of Biomedical Engineering, Introduction to Chemical Engineering, Robotics, Senior Internship

CERTIFICATIONS: Students become AutoCAD Certified Users by the end of their freshman year. During their sophomore year, they will become Fusion 360 Certified Users and have the opportunity to become Certified Associates in CAD for Mechanical Design. By the end of their junior year, students become OSHA 10 certified.

MAKERSPACE: A state-of-the-art makerspace is the focal point of our building. Students are able to work on open-ended projects through their classes, clubs, and personal interest. It includes equipment such as 3D printers, laser cutters, and a CNC mill and router.

AP COURSE COLLEGE CREDIT: Throughout their four years of high school, students have the opportunity to take a variety of AP courses from approximately twenty offerings on campus.

ADVISORY BOARD: As part of our focus on career and technical education, Magnet High School has an industry advisory board that assists our school in making programmatic decisions for our engineering and related curriculum. Members of our advisory board include local industry professionals with careers in a variety of engineering and engineering-related fields, representatives from a local college, parents, students, administrators, and teachers. This diverse and active group has given critical input which has had influence on the design and modification of our school's facilities and equipment, curriculum, career days, and certification credentials.