

Adapting Technical Education in the Age of AI, Electric Vehicles, and Emerging Technologies



In an era defined by rapid technological advancement, the need for skilled professionals who can navigate the complexities of artificial intelligence (AI), electric vehicles (EVs), and other emerging technologies is more pronounced than ever before. The Connecticut Technical Education and Career System (CTECS) is striving to equip students with the knowledge and skills required to thrive in this new era.

AI has begun to revolutionize sectors such as healthcare, finance, and manufacturing. Recognizing its potential, CTECS is revamping policy and curricula to ensure students are gaining an understanding of AI's capabilities and limitations. By imparting AI expertise, CTECS is fostering a generation of professionals who can harness AI's power responsibly and creatively.

The automotive industry is undergoing an immense shift as electric vehicles (EV) take center stage. CTECS is evolving to meet the demand for skilled technicians and designers capable of developing and maintaining EV infrastructure. Curricula now encompass introduction to EV systems and safety. Collaborations with industry leaders and exposure to EV technologies are giving students a practical edge.

Beyond AI and EVs, an array of emerging and rapidly advancing technologies such as cobots, cybersecurity, and renewable energy are reshaping industries. To prepare students for this dynamic landscape, CTECS is fostering adaptability and innovation. Daily lessons and experiences are designed to instill core employability skills like problem-solving, critical thinking, and communication, enabling students to excel in collaborative work environments and navigate the evolving demands of modern industries.

The rapid pace of technological advancement necessitates a strong collaboration between CTECS and employers. This collaboration ensures that curricula remain relevant and up-to-date with the latest industry trends.

By embracing these advancements in technology, equipping students with the skills to thrive in this ever-changing landscape, and fostering strong employer partnerships CTECS is not only preparing a skilled workforce but also nurturing the innovators who will shape the future.

Dr. Ellen Solek, Executive Director



Watch: Preparing for Industry 4.0

CTECS' manufacturing programs are dedicated to staying at the forefront of Industry 4.0. Explore CTECS commitment to advancement and employer partnerships, and gain insight into how students are prepared for the modern manufacturing world.

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**STUDENTS ENROLLED IN
WORK-BASED LEARNING (WBL)**

(as of Oct. 2023)

WBL provides employers with a highly motivated, experienced, responsible student worker. Develop future talent for your company: cttech.org/WBL.