





College Name: Marion Technical College (Marion, Ohio)

Project Title: Bridging the Skills Gap in Smart Manufacturing through a New Technician Education Program

Project Goal: To establish an industry-aligned technician education pathway in Smart Manufacturing to increase the supply of qualified technicians with proficiency in advanced technology applications in the manufacturing sector.

Project Objectives:

Objective 1. Establish the foundational curriculum model for a Smart Manufacturing Technician pathway, integrating information technology and engineering topics.

Objective 2. Create Smart Manufacturing associate degree and certificate programs that are industry-driven and enhanced with experiential learning opportunities.

Objective 3. Enhance educators' understanding of Smart Manufacturing concepts and applications.

The Smart Manufacturing program will attract underrepresented students in STEM, promote careers in manufacturing to high school students as well as allow students to continue on to complete a Bachelor's degree in Engineering at a four-year institution. The Smart Manufacturing pathway will also include entry and fast track options for incumbent manufacturing and IT workers.

Collaborations/Partnerships:

Festo, POET, OhioHealth

1-2 planned grant activities for the first year of the grant:

- 1. Develop new courses (3) for Smart Manufacturing Associate Degree program for internal College Curriculum Committee review.
- 2. Identify employer projects for capstone course.

PI and Co-PI Names and contact information:

PI:

Dr. Elizabeth Azhikannickal, Assistant Professor and Interim Director Engineering Technologies Office:740-386-4155 E-mail: azhikannickale@mtc.edu

Co-PI: J. Michael White, Director Business & Information Technologies Office: 740-386-4111 E-mail: <u>whitejm@mtc.edu</u>

Co-PI:

Dr. Feng Hua, Associate Professor Engineering Technologies Office: 740-386-4167 E-mail: huaf@mtc.edu