



## Developing an Industrial Maintenance Technician Pathway to an Advanced Technology Degree:

The Oklahoma Employment Security Commission predicts a 7.5% annual growth in Mechanical Engineering Tech jobs and a 10% annual growth in Industrial Machinery Mechanic jobs. To help meet these needs, an Industrial Maintenance Technician pathway to prepare engineering technicians was developed. Development includes:

- A Business and Industry Leadership Team (BILT) combining electromechanical and manufacturing industries to ensure the pathway meets the needs of local employers.
- Acquire new instructional equipment to provide flexible time access to the existing fabrication and technical laboratories.
- Through targeted outreach and mentoring, increase the percentage of female and under represented students seeking technical certificates or degrees.

## These changes are expected to raise enrollment, retention, and graduation rates of Engineering Technology and Electronics Technology students. Actions include:

- Update curriculum based on the outcomes of the BILT team: (1st Year)
- Develop stackable credentials that allow entry at each level of the pathway: (1st Year)
- Developing flexible learning laboratory packets to meet student needs.
- Develop courses in non-destructive testing and industrial robotics.





## **Key Collaborators:**

Thomas Henderson, MET, PI—ATE Associate Professor of Electronics IEEE Tulsa Section Student Act. Chair thomas.henderson@tulsacc.edu

COSGROVE&ASSOCIATES

T. Don Crall, MBA, SHEP, Co-PI—ATE Assistant Professor, Advanced Manufacturing & Business don.crall@tulsacc.edu



The National Science Foundation awarded **\$246,726** to Tulsa Community College (TCC) to develop the Industrial Maintenance Technician Pathway starting in June of 2020. TCC has served Tulsa and northeastern Oklahoma since 1970 and serves approximately 23,000 students annually.