

### Problem\*

1. STEM completion rates remain low nationally.
2. The STEM student profile has shifted from recent high school graduates to a majority of working adults.
3. Some highly skilled workers/military veterans end up starting from scratch when pursuing a degree, even with years of skills/learning experiences.
4. Students navigate in and out of programs due to complexity of requirements, class offerings, and life situations.
5. Student success at the course level remains low in STEM courses when dominated by traditional lecturing.

\*Reference: National Academies of Sciences, Engineering, and Medicine. (2016). Barriers and Opportunities for 2-Year and 4-Year STEM Degrees

### Solutions

#### **NEW DEGREE - Multi-Occupation in Engineering & Technology AAS-T:**

**Meet students where they are and value their existing skills by integrating prior learning assessment into degree requirements.**

Students:

1. Create a portfolio of skills/learning related to their work experience (at least 3 years, full-time).
2. Provide documentation of extra-institutional courses/professional development opportunities.
3. Complete general-ed requirements as well as Orientation and Capstone classes.



### ACTIVE LEARNING:

**Incorporate authentic field experiences into program requirements.**

We are integrating course work connecting students to industry through recently implemented city requirements designed to increase energy efficiency of commercial building stock.

### NETWORK:

**Scale Up**

We are creating a network of community, industry, and educational partners to advance accelerated STEM degree program ...

