

The next level of performance education at TSTC

Performance-Based Education (PBE) is the name of TSTC’s course-based Competency-Based Education (CBE) initiative that is focused on the mastery of specific industry skills/competencies with opportunities to accelerate.

PROJECT GOAL

Develop online, competency-based programs for technicians pursuing careers in Architectural Design and Engineering Graphics Technology (CAD) and Cybersecurity.

PROJECT OBJECTIVES

- Provide professional development for faculty.
- Provide ongoing mentoring and support services for students.
- Develop a CBE online that can be used in other CTE fields and by other institutions.
- Improve job placement opportunities so that degree program graduates will be placed promptly and appropriately.
- Provide academic and career opportunities for nontraditional and rural students.

COURSE COMPETENCIES AND LEARNING OBJECTIVES

- Industry Experienced Faculty (5 Years Industry Experience Required)
- Vetted Industry-established skill standards/competencies
- TSSB (Texas Workforce Investment Council)
- NICE/ CAE (Cyber)
- Industry Certifications (Security+, CCNA, CHFI, ACE)
- WECM (Tx Higher Ed Co Board)
Industry-established skill standards for Texas workforce education, career cluster
- Statewide Industry Advisory Board (Recommendations/Validation)

Competencies

A competency is the capability to apply or use a set of related knowledge, skills, and abilities required to successfully perform "critical work functions"

Knowledge, Skills, Abilities

Knowledge, Skills, and Abilities (KSAs) are the attributes required to perform a job and are generally demonstrated through qualifying experience, education, or training

Learning Objectives

Learning Objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction

Course Outcomes

Knowledge [Theory]
Job Tasks [Performance]



PROCESS

Course Planning/Building/Deconstruction/Course Competencies/ Course Outcomes

- Learning Objectives
- Learning Journey
- Lesson *
- Activities (Preparation for assessment)
 - Skill-building Labs
 - Knowledge/Theory Checks
- Assessment (Repeat until mastery)
 - Performance Based Assessments
 - Knowledge Based Assessments

Note: Facilitated by PBE Coaches/Instructors

RESOURCES

Available at Project Website

- PBE Playbook
- Templates [Deconstruction Learning Journey, Assessment, Syllabus]
- Sample Course Modules
- Expanded PBE Process
- Assessment/Grading Policies



MORE INFORMATION

- Performance Based Education @ TSTC
<https://www.tstc.edu/performance-based-education/>
- TSTC NSF Project
<https://bit.ly/tstc-nsf>
- Cybersecurity Program
<https://www.tstc.edu/programs/cybersecurity/>



Online Competency-Based Education of Technicians in Computer-aided Design and Cybersecurity
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