

Talent Strong Texas Pathways Institute #2

Mapping Pathways to Student Post-Completion Goals

Advance Work: Credential Maps

Scaling Talent Strong Texas Pathways

The Texas Legislature has recently validated the role that Texas colleges play in their community as an economic engine. The passage of House Bill 8 is the culmination of many years of dedicated focus by our colleges to develop talent pathways aligned with workforce development needs. Launched in Spring 2021, the TRUE pilot served as a proof point for regional efforts with a focus on building and embedding new credentials of value into talent pathways. Regional efforts to grow talent pathways in partnership with business and industry have flourished and continue to grow with the support of the TSC and TACC. A series of regional stakeholder meetings held in summer 2022 identified the following priorities:

1. Provide students clear pathways to valuable careers
2. Expand short-term credentials of value
3. Improve college and career/work readiness
4. Strengthen education and business partnerships
5. Build inclusive pathways to post-completion success

The first pillar of the Texas Pathways strategy focused on mapping pathways to student end goals and colleges developed easily accessible **program maps** that included prerequisites, course sequences, critical courses, and learning objectives associated with each program at the college. In the evolved Talent Strong Texas Pathways strategy, the first pillar of *Mapping Pathways to Student Post-Completion Goals* builds on previous successes and the five priorities identified by business and educational leaders to develop **credential maps** that show how a student can advance through aligned programs at the college that lead to careers with family-sustaining wages. Texas Pathways made great strides in breaking down silos between continuing education, workforce, and academic transfer programs by dismantling barriers to access and success. Yet there is so much more work to do.

House Bill 8 prioritizes student success through outcomes-based funding for credentials of value and FAST scholarships for dual credit students. The emphasis that House Bill 8 places on credentials of value, student success, and momentum-building in the high school years must be better communicated to students, faculty, staff, and the community.

This institute highlights the innovation and evidence-based strategies occurring throughout Texas to scale accessible and inclusive workforce and academic pathways. Credential maps can show the workforce learner how to navigate through intentionally designed programs, beginning with short-term credentials and early workplace learning, leading toward high-value employment opportunities. Academic transfer students can use credential maps to identify and earn short-term credentials of value that enhance their skills related to their intended baccalaureate degree.

As advance work for the upcoming Pathways Institute, your college will develop or refine credential maps to illustrate how students can navigate workforce and academic pathways.

Cadre Expectations

- Cadre 1 colleges develop at least 2 credential maps.
- Cadres 2 and 3 develop at least 1 credential map.
- Bonus for all cadres: Consider how the credential map(s) applies to various learners: (1) dual credit programs leading to workforce or academic transfer programs, (2) adult education and literacy programs leading to workforce or academic transfer programs, or (3) academic programs with embedded continuing education credentials mapped to transfer partner programs.

Guidelines for Credential Maps

Credential maps should be a visual tool for students, faculty, staff, and the community.

- Consider selecting programs with high student enrollment that lead to occupations with a living wage for a family with two working adults and one child.
- Utilize regional labor market data provided by local workforce boards, industry advisory committees, state agencies, and/or licensed vendors (e.g., Lightcast).
- For workforce credential maps, consider high-wage and in-demand programs that lead to family-sustaining wages.
- For academic credential maps, consider the top programs and associated skills for successful transfer to a strategic 4-year institution partner.

Elements to Include on the Credential Maps

We recommend including the following elements in your credential maps.

- Short-term continuing education credentials, industry-based certificates, and micro-credentials¹
- Level 1 certificates, Level 2 certificates, and applied associate degrees
- Associate degrees and credit applicability information for transfer partners
- Median wages and salary bumps associated with occupations along the credential map
- **Suggested additional elements, if applicable**
 - Entry-level courses and/or critical courses needed to successfully advance along the credential map
 - Employer informed skill sets and marketable skills
 - Work-based learning opportunities
 - Time to complete each credential on the map
 - High school endorsement/CTE program of study aligned with the credential map
 - 15+ dual credit hours that aligns with the credential map
 - Credit mobility and applicability for transfer programs which enable a student to seamlessly earn a baccalaureate degree
 - Industry partners validating the knowledge, skills and abilities of the program
 - Annual job openings
 - Location along the credential map when a student can earn a living wage

¹ Note: Emergency Rules for House Bill 8 passed on August 22, 2023 and stipulate that “fundable credentials” include those awarded in high demand fields and include no fewer than 80 contact hours or five semester credit hours. See [THECB’s Board Book](#), agenda item VI-A(8), item 16c(ii), page 3 for more information.

Intentional focus on the target audience should be made to ensure the usefulness of the credential maps. The appendix includes examples of credential maps that contain some of the suggested elements above and that may be useful in generating discussion and creativity. Each college should create new maps or advance their existing maps to take them to the next level.

Use of Credential Maps at the Institute

- Each college attending the Talent Strong Texas Pathways Institute on November 1-3, 2023, will be asked to reflect on their credential maps during Team Strategy Time.
- College teams will engage with several sets of data to examine their credential maps for improvement and to prioritize future mapping iterations.
- College leadership teams will generate goal(s) to include in their college action plan which enable the institution to better integrate and embed credentials of value into workforce and academic pathways.

Online Resources Provided by Texas Colleges & National Experts

- Explore how TSC used labor market data to identify and visualize Texas' key occupations:
 - [For the state](#)
 - [For each region](#)
- Use MIT's [Living Wage Calculator](#) to determine the required annual income before taxes for a family with 2 working parents and a child for the counties that your college serves
- Explore the Texas Education Agency's (TEA) [Career and Technical Education Programs of Study](#). View links for each individual state-approved CTE program under TEA's 14 career clusters and learn about the industry-based certificates that high school students may earn which enable the district to earn College, Career and Military Readiness (CCMR) outcomes bonus funds. Median wages for aligned occupations are provided.
- Learn more about [building micro-pathways](#) with the Alamo Colleges.

Appendix: Example Credential Maps

- Alamo Colleges: Nursing
- Austin Community College: Manufacturing Assembler
- Dallas College: Logistics Technician
- Del Mar College: Industrial Machining Applied Technology
- Houston Community College: Cybersecurity
- Texas Success Center: Aircraft Mechanics and Service Technicians

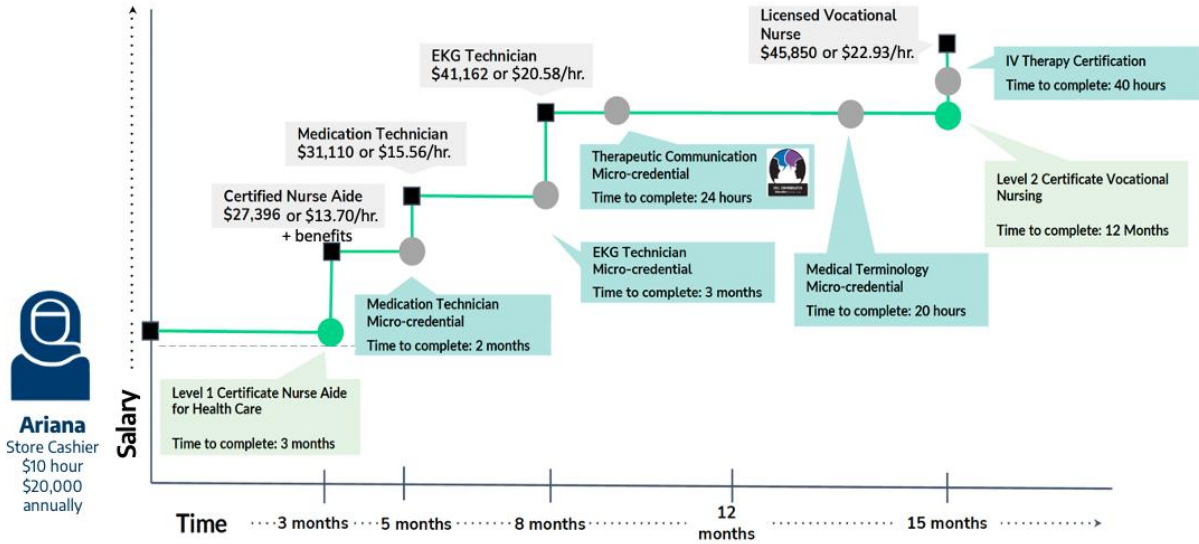
Submission Guidelines

- Submit your credential map as a single document (e.g., word, PDF, or PPT slides) to the DOCUMENT CENTER on the [TSTP Institute #2 Event Page](#) by **Friday, October 20, 2023**.
- Complete this [short survey](#) to provide feedback on this activity.
- Please bring copies of your credential maps to the event to use during Team Strategy Time.

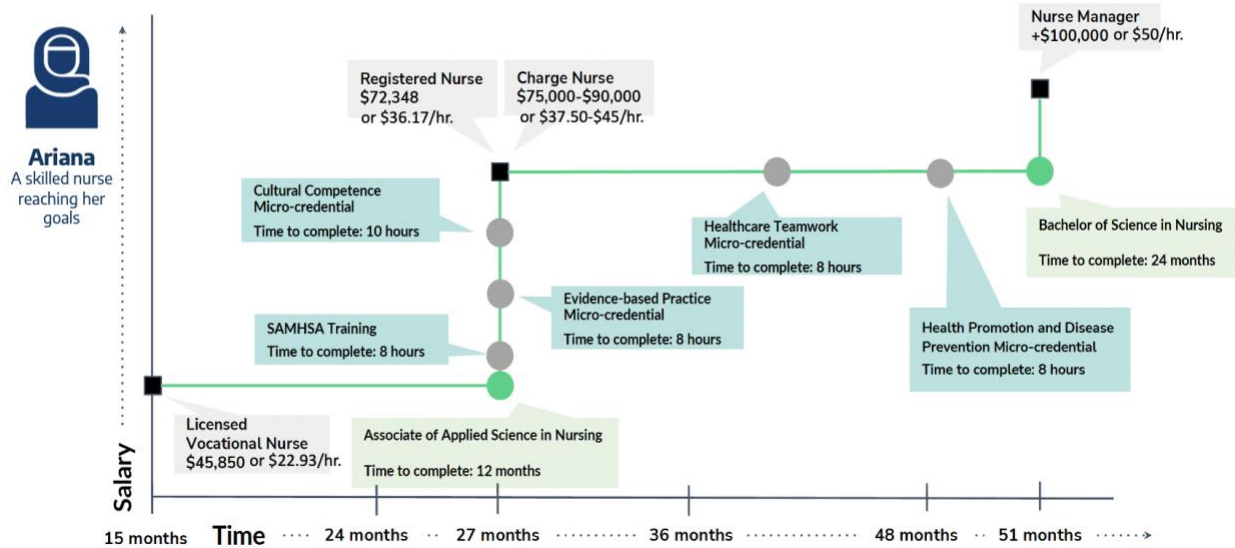
Appendix

Alamo Colleges

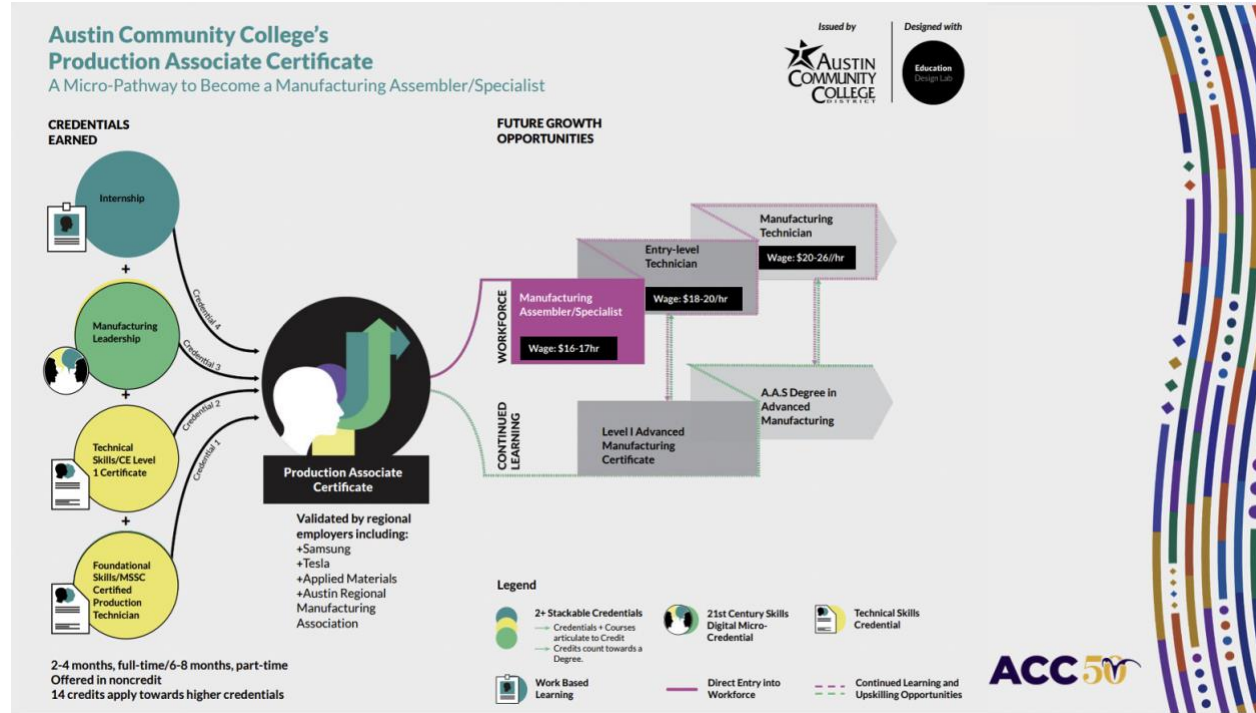
Alamo Colleges Nursing Micro-Pathway



Alamo Colleges Nursing Micro-Pathway



Austin Community College



Dallas College

TRUE Pathways In Practice- Logistics Technician



Del Mar College

Industrial Machining Applied Technology Specialization: Industrial Rotating Equipment Mechanic (Millwright)

Helpers Median Salary \$30,967	Maintenance Technician Median Salary \$48,750	Millwright Median Salary \$54,920
CE OSA MCHN 2005* Millwright III MCHN 2007* Millwright IV MCHN 2016* Millwright VII MCHN 2018* Millwright VIII *Course able to be matriculated to credit	Level II Certificate MCHN 1325 Millwright I MCHN 1338 Basic Machine Shop I MCHN 1341 Basic Machine Shop II MCHN 1329 Millwright II MCHN 1300 Beginning Machine Shop MCHN 1343 Machine Shop Mathematics MCHN 1308 Basic Lathe MCHN 2312 Millwright V MCHN 2314 Millwright VI MCHN 1313 Basic Milling Operations INMT 2388 Internship – Manufacturing Technology/Technician OR PTRT 1313 Industrial Safety COMG 1391 Special Topics in Communications, General TECM 1301 Industrial Mathematics	Associate in Applied Science ENGL 1301 Composition I Core Mathematics OR Life & Physical Sciences Core Elective Communications (SPCH) Core Core Elective Creative Arts or Language, Philosophy & Culture Core Elective Core American History, Government/Political Science OR Social and Behavioral Core Elective
	Level II Certificate CE OSA	Level II Certificate CE OSA

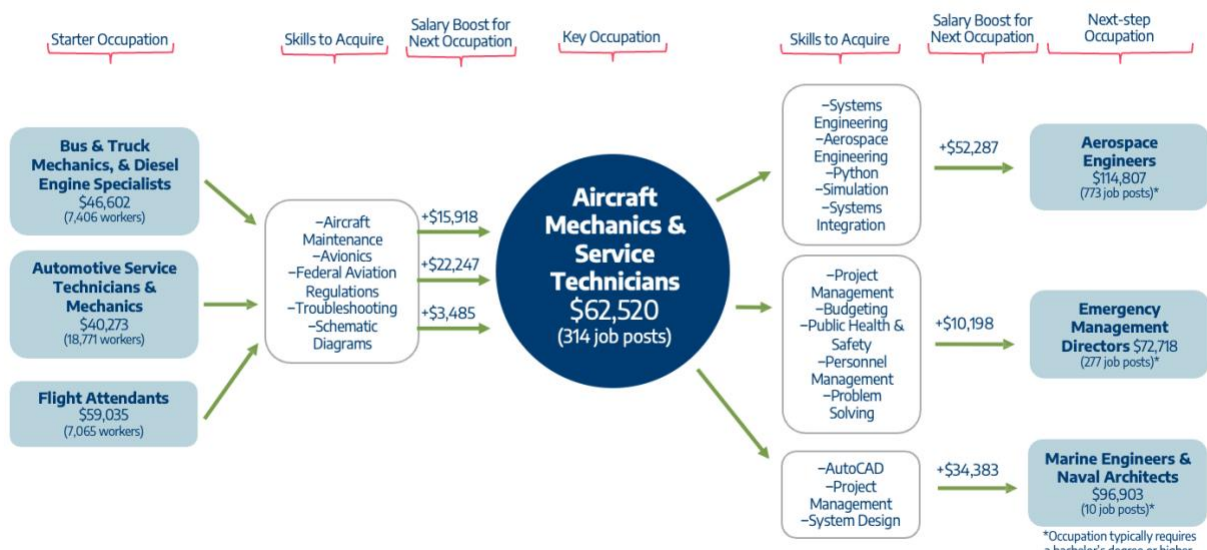
Houston Community College



Texas Success Center

Key Occupation: Aircraft Mechanics & Service Technicians

Region: North Texas



*Occupation typically requires a bachelor's degree or higher.

<https://tacc.org/tsc/current-research>. See Labor Market Insights: Phase 2

Source: Lightcast, 2022.