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JAVELINA
SKILLED TRADES ACADEMY

Javelina Skilled Trades Academy

The **Javelina Skilled Trades Academy** at Texas A&M University Kingsville is designed to equip students with the essential skills and certifications required for high-demand careers in the skilled trades sector. The Academy focuses on providing hands-on, practical training through nationally recognized certifications, empowering students to enter the workforce ready to meet the growing demands of industries focused on sustainability and renewable energy.

Program Overview

The **Javelina Skilled Trades Academy** offers comprehensive training for individuals interested in pursuing careers in renewable energy, construction, broadband, and weatherization. The curriculum is designed around the National Center for Construction Education and Research (NCCER) Core certification, which serves as a foundation for all skilled trade disciplines.

★ NCCER Core

This certification provides students with fundamental knowledge of construction safety, tools, and basic construction techniques. It is the gateway to more advanced certifications in specialized trades.

★ OSHA 10

The Occupational Safety and Health Administration (OSHA) 10-Hour certification equips students with essential knowledge of workplace safety, hazard recognition, and federal OSHA regulations to promote a safe and compliant working environment in construction and general industry settings.

★ Electrical

Students will gain the knowledge and skills to work in residential, commercial, and industrial electrical systems through hands-on training in wiring methods, blueprint reading, safety protocols, and full compliance with the National Electrical Code (NEC), ensuring they are job-ready upon certification.

★ Carpentry

This certification provides students with in-depth training in essential construction techniques, including framing walls, floors, and roofs; interpreting and applying blueprints and building plans; and safely operating a wide range of hand and power tools, all of which are critical for successful careers in both residential and commercial construction environments.

★ Weatherization

As energy efficiency becomes a critical focus, weatherization certifications equip students with the skills to enhance the energy performance of homes and buildings, including insulation methods, air sealing, moisture control, and basic energy auditing—aligned with Building Performance Institute (BPI) standards to prepare students for employment in the weatherization and energy efficiency sector.



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★ **Broadband**

The broadband certification pathway prepares students for telecommunications careers with hands-on training in fiber optics, cabling, and installation, aligned with Fiber Optic Association (FOA) standards. Students gain skills in splicing, testing, troubleshooting, and safety, while exploring technologies driving broadband expansion.

★ **Wind Energy**

This certification prepares students for careers in the renewable energy sector by providing essential training in wind turbine technology, safety procedures, mechanical systems, and basic electrical concepts used in wind farm operations.

★ **Solar Energy**

With solar power becoming a key player in the renewable energy landscape, the Academy provides training in photovoltaic system installation and maintenance, preparing students for roles in solar energy companies and related industries.

★ **Alternative Energy**

This certification includes broader training in sustainable energy technologies, with a focus on innovative solutions like hydrogen power, bioenergy, and hybrid systems, preparing students to contribute to the evolving energy sector.

DOL Registered Apprenticeships

The **Javelina Skilled Trades Academy** also offers pathways into U.S. Department of Labor (DOL) Registered Apprenticeships, which provide students with a unique opportunity to earn while they learn. These apprenticeships combine on-the-job training with related technical instruction, allowing participants to gain industry-recognized certifications while receiving wages from their employer. By participating in a Registered Apprenticeship, students not only acquire valuable certifications but also gain practical, hands-on experience with local employers. Graduates of these programs are well-positioned for long-term career growth in high demand industries. Additionally, apprenticeship graduates often experience faster career advancement and higher earning potential due to the combination of classroom instruction and real-world experience.

Program Benefits

- ★ **Job-Ready Skills:** All certifications offered through the Javelina Skilled Trades Academy are nationally recognized, making students competitive in the job market.
- ★ **Hands-On Learning:** The Academy emphasizes practical experience through lab-based learning and real-world projects.
- ★ **Industry Partnerships:** The Academy collaborates with local and regional employers to ensure that training aligns with current workforce needs, offering job placement support and opportunities for internships.
- ★ **Career Growth:** Students who complete certifications can pursue various roles in high-demand fields, with opportunities for advancement in their chosen trade.
- ★ **Pathway to a Degree:** Some advanced skilled trades certifications can be applied toward an undergraduate degree, allowing students to earn academic credit for their training and accelerate progress toward their educational and career goals.