



ALAMO COLLEGES DISTRICT  
St. Philip's College

# CONSTRUCTION TECHNOLOGY

## Program Coordinator

Mr. Gilbert Noriega  
(210) 486-7096  
gnoriega6@alamo.edu

## Adjunct Faculty

Mr. Rey Sanchez III  
(956)325-9898  
rsanchez825@alamo.edu





ALAMO COLLEGES DISTRICT  
St. Philip's College

# CONSTRUCTION TECHNOLOGY

Shortage of construction skilled labor in the United States...



Two-Thirds of Contractors Have a Hard Time Finding Qualified Craft Workers to Hire Amid Growing Construction Demand.



According to Bureau of Labor Statistics and National Association of Home Builders (NAHB) there are currently 143,000 vacant construction positions nationwide. In fact, a recent survey by the NAHB revealed that 69 percent of its members were experiencing delays in completing projects on time due to a shortage of qualified workers, while other jobs were lost altogether





ALAMO COLLEGES DISTRICT  
St. Philip's College

# CONSTRUCTION TECHNOLOGY

Shortage of construction skilled labor in the United States...

CBS Rebuilding America's Pool of Construction Workers

<https://www.youtube.com/watch?v=DcNGxALpVx0>

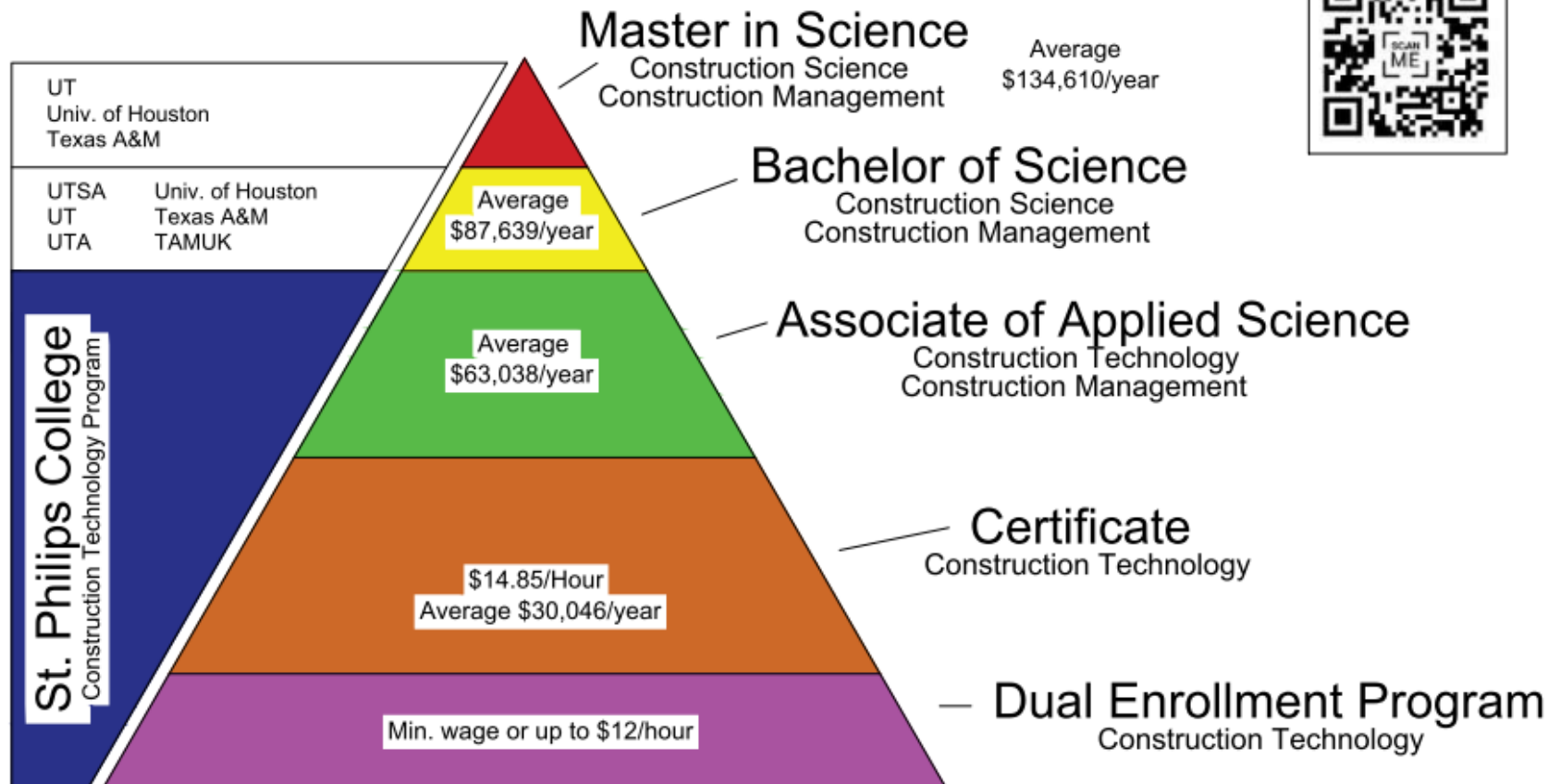


# ALAMO COLLEGES DISTRICT

## St. Philip's College

# CONSTRUCTION TECHNOLOGY

## CAREER PATH IN CONSTRUCTION







ALAMO COLLEGES DISTRICT  
St. Philip's College

# CONSTRUCTION TECHNOLOGY

What can I do with a career in Construction Technology?

Graduates from the Construction Technology programs are work-ready for a variety of craft trade professions in the construction industry including Construction Worker, General Contractor/Superintendent Plumbing Contractor Superintendent, Plumber's helper, and Plumber's Apprentice.





# ALAMO COLLEGES DISTRICT

## St. Philip's College

### Walt Disney Concert Hall Center – Los Angeles, CA

- 6,500 Metal Panels (not two alike)
- One piece of metal panel weighs 145 lbs.
- Bonded with 3M VHB adhesive foam tape
- Design 1987 - 1991
- Construction 1999 – 2003
- Cost: \$274 Million

<https://en.wikiarquitectura.com/building/walt-disney-concert-hall/>







ALAMO COLLEGES DISTRICT  
St. Philip's College

# CONSTRUCTION TECHNOLOGY

Associates of Applied Science Degree ( 2 Year)  
Certificate Degree (Level I) (1 Year)

The Construction Technology program provides learners with a well-rounded education in construction principles and practices with an emphasis on real-world hands-on learning experience in our construction laboratory. Learners build full-size mock-ups and participate in various service learning construction projects that will prepare learners for a fulfilling craft trade profession of their preference.

**Program Coordinator**

Mr. Gilbert Noriegas  
(210) 486-7096  
gnoriega6@alamo.edu

**Adjunct Faculty**

Mr. Rey Sanchez III  
(956)325-9898  
rsanchez825@alamo.edu



ALAMO  
COLLEGES  
DISTRICT

---

St. Philip's College



# Notes:

- **What are the Fastest Growing Construction Markets?**
- Professionals predict the construction industry will have one of the largest increases in real output, reaching almost \$1.2 trillion by 2020. Upcoming efforts to modernize the United States' decrepit infrastructure will create such output.
- The [renewable energy sector](#) will also be booming over the next few years. The follow through of new laws is key here. The government plans to make renewable energy 20% of the country's total energy mix by 2020. This includes 10,000 MW in subsidized housing and 3.0 GW in military capabilities by 2025. With continued climate change issues, federal and state governments are pushing for renewable energy sources. These plans are big business for construction companies.
- The U.S. population is expected to grow from 321.2 billion to 338 billion. This increase of people results in a rise of residential housing as well. This will escalate [residential construction](#) to the top of the growing markets' list.
- The government plans to raise the budget by 1.9% to support home ownership, sustainable community and housing developments. This also provides access to affordable housing for homeless and vulnerable families.
- Commercial construction will also continue to grow. With more consumer spending and governmental investments in tourism, office buildings and retail space, [commercial construction businesses](#) will reap the rewards.



# Notes (Continue):

## Today's skilled workers are advanced professionals.

- Skilled workers not only work with their hands to build, fix or install something, there is also a significant amount of brainpower required to do most jobs. Skilled workers must be computer literate, as many machines and equipment use computer programs to operate. You must have good math and reading skills in order to calculate, measure and read blueprints accurately. On the more exciting side, innovative advances in technology have enabled skilled workers to empower the use of robotics and lasers with their trade, changing how skilled workers did their job in the past.
- **Skilled workers and construction managers come together.**
- Construction managers are constantly looking for skilled labor professionals to add to their construction project team. Finding qualified skilled workers is clearly challenging. Many jobs remain vacant for weeks resulting in construction project delays. The amount of time it takes to screen candidates and check to make sure training and certifications are up-to date puts a tremendous strain on construction managers.
- Plus, all of the paperwork involved with payroll and benefits slows down the hiring process, taking away precious building time. But thanks to construction staffing companies, like Tradesmen International, project managers have access to hundreds of qualified, pre-screened skilled workers, ready to start work the moment you call. Skilled workers can take advantage of opportunities by joining a construction staffing agency. Joining Tradesmen's skilled labor workforce offers many advantages including:
  - Immediate work and consistent work
  - Competitive wages with comprehensive benefits
  - Vacation pay, 401K retirement matching
  - Professional growth development
  - Variety of construction projects with multiple contractors who focus on different work
- There is no reason a shortage in skilled workers needs to delay construction projects. And there is no reason skilled laborers need to go through long unemployment periods. Construction staffing services – firms like Tradesmen International with tens of thousands of field-tested craftsmen in their database – are the solution to both of these problems. Call Tradesmen International to solve the problems of [finding a qualified skilled labor workforce](#) and [high-paying skilled labor jobs](#).

