

## PCAC Tour of Center for Petrochemical, Energy, and Technology at San Jacinto College

Facilitator Emily Morris introduced Jim Griffin, Associate Vice Chancellor and Sr. Vice President of CPET, who gave an overview of the facility and introduced other CPET instructors who assisted with the tour.

Griffin explained that CPET operates within one of the world's most concentrated petrochemical regions, with approximately 130 petrochemical plants located within a 12-mile radius of the campus, representing about 30,000 direct jobs and about 100,000 indirect jobs. Griffin said the industry presence drives CPET's mission to provide industry-aligned training for the petrochemical, energy, and related sectors in the Pasadena and Greater Houston area.

San Jacinto College has trained process technology, instrumentation, and electrical technicians for nearly three decades. About 10 years ago, the program was expanded through a collaboration between San Jacinto College and regional industry leaders to develop a world-class training facility designed "by industry, for industry," which resulted in CPET. The current facility, built on a former golf course site, was completed in 22 months at a cost of \$67 million and has been in operation for about six years.

Griffin introduced key members of the CPET team, including Jeff Pearce, Coordinator for Education and Workforce, and Jay Culver, Incumbent Training Director. Together, they described how CPET blends technical instruction with a strong emphasis on safety culture, communication, and teamwork, while providing customized noncredit and incumbent training for industry partners.

### Other facts about the program included:

- **Credentials:** Associate degrees; 60 credit hours
- **Time to completion:** ~2 years (full-time); ~3 years (part-time)
- **Enrollment:** ~3,000 students annually
- **Student mix:** ~50% degree/certificate students; ~50% incumbent workers
- **Programs offered:** Six associate-degree programs
- **Largest program:** Process Technology
- **Student profile:** Majority first-generation college students
- **Completion rate:** ~92%
- **Average GPA:** ~3.1 at graduation
- **Employers:** Regional and national petrochemical companies; additional placement in related industries, including **SpaceX** and **Eli Lilly**
- **Training focus:** Technical skills; safety culture; communication; teamwork

Griffin's overview concluded with PCAC members dividing into small groups for guided tours of CPET's training units and labs, allowing attendees to see firsthand how students are prepared for careers in petrochemical and related industries.

PCAC attendees observed the centerpiece of CPET's hands on training: the capstone extended run, which was underway at the time of the tour. During an extended run, students operate a pilot-scale unit continuously over multiple days, working rotating shifts that mirror real plant operations. Students practice shift turnover, permitting, troubleshooting, and response to simulated upsets and emergency scenarios. Industry representatives observe these runs, and many use them as opportunities to engage with students and conduct interviews.

As part of the CPET tour, attendees observed:

- Instrumentation and valve training classroom (in progress)
- Gas chromatography lab

- Electrical and motor control lab
- The control room, where students were monitoring and directing operations
- Outdoor process training systems, where students were communicating with the control room and troubleshooting errors introduced by the instructors
- Glass pilot plant labs used for small-scale, hands-on process training
- The glycol distillation unit used for capstone and extended-run operations