

START

HIGH SCHOOL

# PATHWAY TO BECOMING AN ENGINEER

## WHY BE AN ENGINEER?

Engineers design, build, and maintain the things we need for our modern lives – car engines, robots, cell phones, software systems, airplanes, roads and oil wells.

**\$89,000**

Average yearly wage of engineers in the US

**\$121,729**

Average yearly wage of oil and gas industry engineers in California.

Follow the pathway to find out what it takes for you to become an engineer.

**"Life is full of choices, you always have one, but don't forget the one you choose can define your future." – Shalanda Davis-Layton, Reliability Engineer, Chevron**

To learn more, visit [CEICareersInEnergy.com](http://CEICareersInEnergy.com)

**1** TAKE SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) CLASSES

**2** GET INVOLVED

- Join or start clubs (robotics)
- Find a mentor/teacher
- Tour colleges

**3** LEARN ABOUT ENGINEERING

- Talk with teachers and counselors
- Meet an engineer

**4** DECIDE ON A COLLEGE PATH DURING YOUR JUNIOR AND SENIOR YEARS

- Submit applications
- Apply for scholarships
- Take practice tests

**7** 2ND YEAR OF COLLEGE – DECIDE YOUR MAJOR

- Talk with your advisor(s) and professors

**6** MEET WITH YOUR ADVISOR(S)

- Select classes that work for you
- Don't take ALL hard classes

**5** BE ENGAGED IN COLLEGE

- Go to class
- Talk with your professors
- Find a study group
- Use free tutoring services

**7a** COMMUNITY COLLEGE STUDENTS DECIDE WHERE TO TRANSFER

- Meet with your advisor(s)
- Tour university campuses
- Talk to transfer students
- Make sure you've passed all CSU/UC-required courses

**8** GET INVOLVED

- Seek out a career mentor
- Participate in internships
- Join LinkedIn
- Attend networking events and career fairs
- Join professional organizations - SHPE

**9** BEFORE GRADUATION

- Talk to your professors about jobs
- Ask for letters of recommendation and references
- Take the Engineer -In-Training (EIT) Exam
- Talk with professional organization members
- Update your resume and cover letter

**10** GRADUATE WITH A DEGREE IN ENGINEERING



COLLEGE

## KEEP IN MIND!

Don't worry about where you attend college. All engineers get paid well, no matter what school they're from.

Now you're an engineer!

Congratulations!

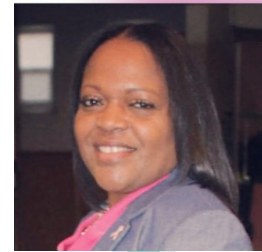
CALIFORNIANS FOR  
**ENERGY**  
INDEPENDENCE



**CAREERS IN ENERGY**

# MEET SHALANDA

## HER PATHWAY TO BECOMING A FACILITY ENGINEER IN THE ENERGY INDUSTRY



**NAME:** Shalanda Davis-Layton

**POSITION:** Reliability Engineer

**COMPANY:** Chevron

### **GRADUATED FROM HIGHLAND HIGH SCHOOL AND ACCEPTED INTO CAL POLY**

Being accepted was a dream come true despite a high school teacher once telling her she would never be accepted into Cal Poly.

Pursued a degree in Mechanical Engineering.

### **BORN IN LANCASTER, CA**

Moved to Bakersfield, CA with her parents when she was two years old.

Parents divorced when she was five, raised by a single mother in a low income household.

### **DUE TO FINANCIAL CHALLENGES, HAD TO RETURN HOME. SELECTED FOR AN ENGINEERING ASSISTANT INTERNSHIP AT BECHTEL PETROLEUM.**

This opportunity solidified her pursuit to stay focused and get back to school.

### **SHE CHOSE MECHANICAL ENGINEERING FOR TWO REASONS:**

She wanted to design a car her grandmother could drive without feet since she had recently had her leg amputated due to diabetes.

She met a friend of her fathers who was a Mechanical Engineer. She was in awe of the work and the lifestyle they were living and set her goals high.

### **FACILITY ENGINEER AT CHEVRON**

Managed multiple small and large projects from \$100,000 to \$20,000,000.

Supported business planning efforts, led multi-million savings projects and served as a mentor.

Recently selected to work as a Reliability Engineer. Responsible for providing reliability support for large projects and ensuring efficient reliable operation standards are taking place.

### **SHALANDA MOVED TO CHICAGO AND WORKED AS AN ACCOUNT MANAGER FOR A LOCAL POWER COMPANY, COMMONWEALTH EDISON, THEN AT ENRON AS A SENIOR PROJECT MANAGER.**

Wanting a more stable career and to be closer to family, Shalanda landed her dream job at Chevron as a Facilities Engineer.

### **SHALANDA WAS THE FIRST PERSON IN HER FAMILY TO GRADUATE FROM A FOUR-YEAR UNIVERSITY.**

### **SHE ENROLLED PART-TIME AT BAKERSFIELD COLLEGE. TRANSFERRED CALIFORNIA STATE UNIVERSITY FRESNO AND GRADUATED WITH A DEGREE IN MECHANICAL ENGINEERING**

While attending Fresno State, she was an active member and secretary for the National Society of Black Engineers (NSBE) and involved in the American Society of Mechanical Engineers (ASME).

## WHAT WILL YOUR PATH BE?