Finding the Right Engineering Major

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April 9, 2022
Multiple Steps & Paths to Success

Debbie Meeks

EDUCATION
Bachelor of Science
Chemical Engineering

California State University
Long Beach / Tau Beta Pi

Oppunities thru internships

- Develop technical & workplace social skills
- Experience different business settings
- Determine fields/environments that you thrive in
- Create relationships and contacts for future jobs

A career path is never a straight line, many lessons along the way and growing your network is key.

INTERNSHIPS
Librarian Aid
Student Worker

UNR – Science Library
SCAQMD – Landfill Rulemaking Division

WORK EXPERIENCE
Process/TS Engineer
Sales/Sales Manager
Strategic Alliance Manager

ARCO LA Refinery
Akzo Nobel/Houston TX
Shell Oil Company/Virtual

Government Relations/Sacramento

Shell USA

100+ Women Strong  CSULB College of Engineering
Now is a Great Time to Be an Engineer

Employment opportunities for Engineers are bright

Women are only 15% of working Engineers\(^1\)

Large focus on Diversity, Equity and Inclusion in the workplace today

Mechanical & Electrical Eng. jobs will increase by 7%

Chemical Engineering jobs will increase by 9%

Engineering Degrees Awarded Nationally

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<td>17.80%</td>
<td>18.10%</td>
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- Chemical Engineer $108,540
- Electrical Engineer $103,390
- Mechanical Engineer $90,160
- Civil Engineer $88,570

...by 2026 there will be more jobs than applicants\(^1\)

\(^1\) US Census Bureau
So What Do Engineers Really Do? We are Problem Solvers

“Scientists study the world as it is; engineers create the world that has never been.”
- Theodore von Karman, Hungarian-American mathematician, aerospace engineer, and physicist

“The ideal engineer is a composite ... She is not a scientist, she is not a mathematician, she is not a sociologist or a writer; but she may use the knowledge and techniques of any or all of these disciplines in solving engineering problems.”
- Nathan W. Dougherty, American civil engineer
Zero-In on the Best Fit for You

Understand what motivates you

MECHANICAL ENGINEERING
Do you like to take things apart?

CIVIL ENGINEERING & CONSTRUCTION MGMT
Are you interested in systems that serve society related to water, soil, environment, structures, and transportation?

AEROSPACE ENGINEERING
Are you fascinated with aircraft, spacecraft, satellite, and systems for national defense?

CIVIL ENGINEERING & CONSTRUCTION MGMT
Are you interested in systems that serve society related to water, soil, environment, structures, and transportation?

ELECTRICAL ENGINEERING
Are you curious about power, electronics, and control systems?

BIOMEDICAL ENGINEERING
Are you excited about advancing technology and medicine and develop new devices/equipment for improving human health?

CHEMICAL ENGINEERING
Are you curious how temperatures and mixtures affect outcomes?

COMPUTER ENGINEERING/ COMPUTER SCIENCE
Are you interested in developing computer hardware/software for various applications?
Many Industries Hire a Variety of Engineers

• Chemical / Polymers
• Energy / Transportation
• Environmental
• Food Processing
• Manufacturing – Water/Wastewater
• Medical - Pharmaceuticals

• Machine Tool Design
• Manufacturing – Additives / 3D
• Marine
• Robotics – AI & Controls
The Sky is the Limit as an Engineer

DON’T RESTRICT YOUR OPTIONS
An engineering degree opens many doors

WIDE VARIETY OF JOBS
Public companies, private companies, startups, Gov’t agencies, universities

TRANSFERABLE SKILLS
Engineering degrees provide essential technical and leadership skills

ENGINEERS ARE FOUND AT ALL ORGANIZATION LEVELS
What you do upon graduation will change throughout your career
Session Activity: Where are you on your Journey?

What is holding you back from confidently declaring your Engineering Major?

• Take 5 minutes to write down your biggest concerns and why
• We will share with large group for 10 minutes
Companies Hiring in the LB area
Mechanical Engineers

Space Talent

P2S INC

Viasat

FLUOR

Relativity

Virgin Orbit
Companies Hiring in the LB area
Civil Engineers

- City of Long Beach
- moffatt & nichol
- Fuscoe Engineering
- BKF Engineers
- Fluor
- Dewberry
- Kiewit
- LA Port of Los Angeles
- Port of Long Beach
Companies Hiring in the LB area
Chemical Engineers

- ENVIRO kinetics
  - Technical Sales Engineer
  - Ontario, CA

- Additive Circuits Technologies
  - PCB Process Engineer
  - Brea, CA

- Marathon
  - Technical Service Engineer
  - Environmental Engineer
  - Products Control/Economics Engineer
  - Los Angeles Refinery, CA

- Abbott
  - Process Engineer
  - Sylmar, CA

- Microchip
  - Engineer I Process
  - Garden Grove, CA
Companies Hiring in the LB area
Electrical Engineers

- Relativity
- Boeing
- Newmar
- EOS
- STC System Technical Corporation
- Northrop Grumman
- Pacific Standard Environmental
- Orbit
- Raytheon Intelligence & Space
- Lockheed Martin
- SpaceX
- Siemens
- Onyx
- OK International
How can 100+ Women Strong support you?
Let us know – we are seeking your input!

- Brainstorm career choices for my engineering major
- Improve my resume and social media presence
- How to find Internships
- How to build and maintain professional networks
- Learn from one another
- Find Industry contacts in my career path
- What to expect when starting a new job
- Share current struggles and concerns
- How to find Internships
- Improve my resume and social media presence

Industry Contacts

Small Group Sessions

Trusting Environment

Career Advice

100+ Women Strong
CSULB College of Engineering
100+ Women Strong want to thank you for attending Finding the Right Major

“The journey of a thousand miles begins with one step.”  
Take a step today!  

Make a Connection Today
Introduce yourself & exchange information, ask questions. 
Connect with speakers on Whova App

Powerful Information
Review all CC Slide Decks: https://www.csulb.edu/college-of-engineering/coaching-circles-0

Create a Journal
Write down lessons learned, goals, next steps & timeline. 
Grow & maintain your network

Post Event Survey
We want your feedback. 
Survey on Whova App

Join Us Again Soon
Attend our next event—later this year 
https://www.csulb.edu/college-of-engineering/100-women-strong

Get Support
Be a member of 100+ Women Strong  
https://www.csulb.edu/college-of-engineering/100-women-strong-steering-committee

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CSULB College of Engineering
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<td>Debbie Meeks</td>
<td>Shell USA</td>
<td>Government Relations</td>
<td>(99+) Deborah Meeks</td>
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<tr>
<td>Gina Orozco</td>
<td>SoCalGas</td>
<td>VP-Gas Eng’g &amp; System Integrity</td>
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<td>Assistant Professor, Dept of CE</td>
<td>(99+) Laurie Huning</td>
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<tr>
<td>Mariel Cisneros</td>
<td>Northrop Grumman</td>
<td>Systems Engineering Manager</td>
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