

Envisioning the Future
BEACH WOMEN IN ENGINEERING CONFERENCE

Finding the Right Engineering Major

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100+ Women Strong
CSULB COLLEGE OF ENGINEERING

Multiple Steps & Paths to Success

Debbie Meeks



EDUCATION
Bachelor of Science
Chemical Engineering

California State University
Long Beach / Tau Beta Pi

Opportunities 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



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

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



Government
Relations/Sacramento

Shell USA

Now is a Great Time to Be an Engineer

US Bureau of Labor Statistics – 2022 Starting Salaries

- Chemical Engineer \$108,540
- Electrical Engineer \$103,390
- Mechanical Engineer \$90,160
- Civil Engineer \$88,570

...by 2026
there will be
more jobs
than
applicants¹

Employment opportunities
for Engineers are bright

Women are only 15% of
working Engineers¹

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%

¹ US Census Bureau

Engineering Degrees Awarded Nationally

Gender	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Female	17.80%	18.10%	18.40%	18.90%	19.10%	19.90%	20.90%	21.30%	21.90%	22.50%
Male	82.20%	81.90%	81.60%	81.10%	80.90%	80.10%	79.10%	78.70%	78.10%	77.50%

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?

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?

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?

ELECTRICAL ENGINEERING

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

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

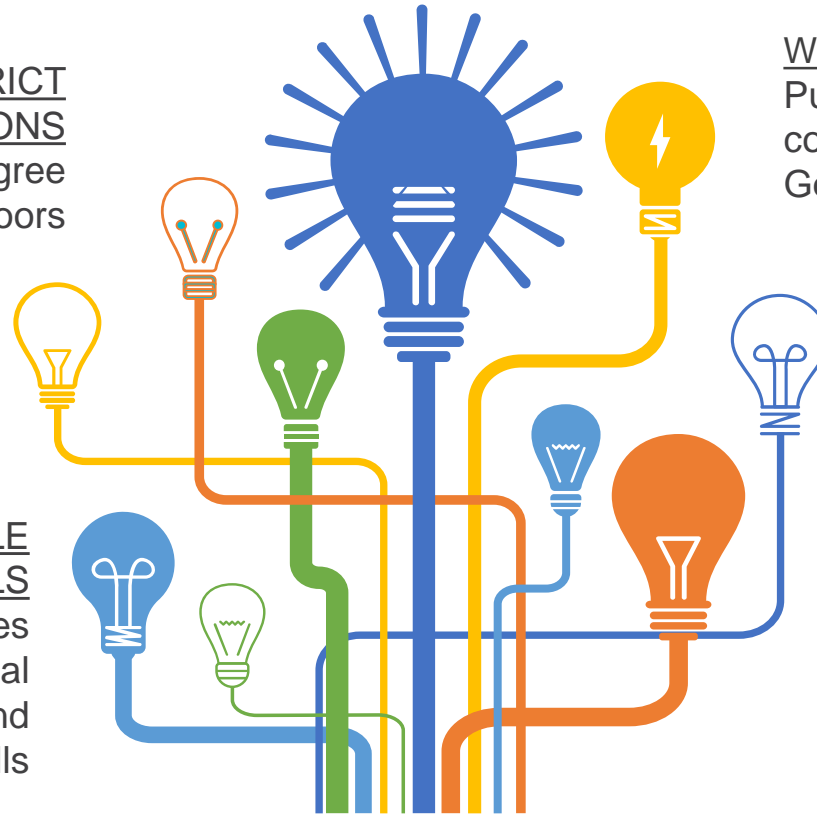
The Sky is the Limit as an Engineer

DON'T RESTRICT YOUR OPTIONS

An engineering degree
opens many doors

TRANSFERABLE SKILLS

Engineering degrees
provide essential
technical and
leadership skills



WIDE VARIETY OF JOBS

Public companies, private
companies, startups,
Gov't agencies, universities

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?

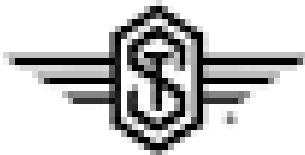
What is holding you back from confidently declaring your Engineering Major?

- 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



PES INC



Space Talent

FLUOR

Relativity



Companies Hiring in the LB area Civil Engineers



Companies Hiring in the LB area Chemical Engineers



Technical Sales
Engineer
Ontario, CA



PCB Process Engineer
Brea, CA



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



Process
Engineer
Sylmar, CA



Engineer I Process
Garden Grove, CA

Companies Hiring in the LB area Electrical Engineers

Relativity



SPACEX



STC System Technical Corporation

NORTHROP GRUMMAN

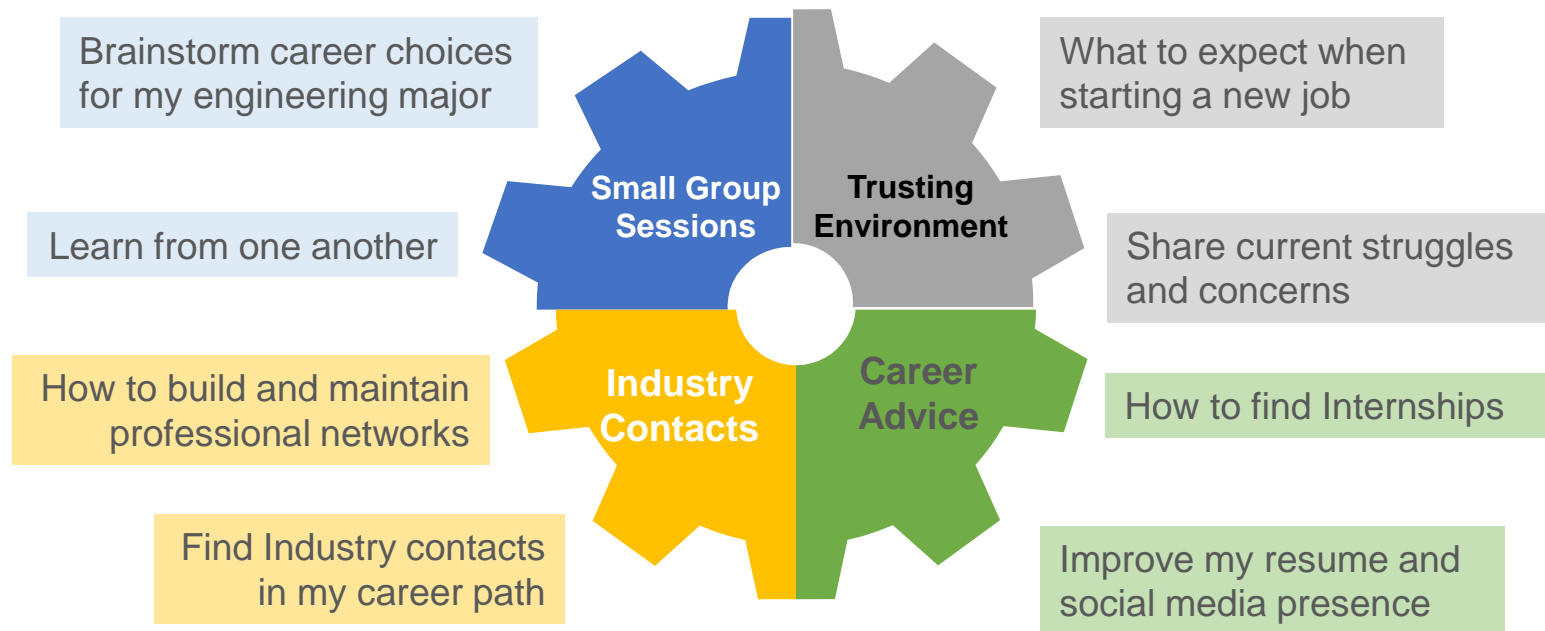


SIEMENS



OKInternational

How can 100+ Women Strong support you? Let us know – we are seeking your input!



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!

Lao Tzu

Make a Connection Today

Introduce yourself & exchange information, ask questions.

Connect with speakers on Whova App



Post Event Survey

We want your feedback.

Survey on Whova App



Powerful Information

Review all CC Slide Decks:

<https://www.csulb.edu/college-of-engineering/coaching-circles-0>



Join Us Again Soon

Attend our next event—later this year

<https://www.csulb.edu/college-of-engineering/100-women-strong>



Create a Journal

Write down lessons learned, goals, next steps & timeline.

Grow & maintain your network



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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BEACH WOMEN IN ENGINEERING CONFERENCE

Linked In Contacts – Finding the Right Major

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