

# Designing the Evolution of an Ergonomist

**Camille Major, CHFP**  
**Workforce Personal Safety Engineer**  
**Human Factors Engineer**

January 9, 2019

aes applied ergonomics society presents

The 22nd Annual

appliedergonomics

CONFERENCE 2019

Optimize business through applied ergonomics



March 25-28, 2019 • Hyatt Regency New Orleans • New Orleans, Louisiana

## Big Ideas in the Big Easy

Be a part of the conference where attendees gather from around the world to share best practices with other professionals in ergonomics, healthcare, safety, human resources and risk management.

**Applied Ergonomics Conference (AEC) 2019**

March 25 – 28 | Hyatt Regency New Orleans

[www.iise.org/AEC](http://www.iise.org/AEC)

# Disclaimer

These are the thoughts of Camille Major and do not reflect any other entity that I am affiliated with in the past or current.

# Designing the Evolution of an Ergonomist

Has the evolution of an ergonomist occurred by design or happenstance? Meeting business needs can support our personal career goals if we know how to identify our own value metrics and develop a strategy. No longer is our role static and unchanging. Fluid, flexible and adaptable is the new ergonomist of the future. Join us for a dynamic case study in motion.

# Human Factors - Ergonomics Engineer

Our goal:

1. Keep people safe from getting hurt
2. Work Smarter and not Harder
3. Improve productivity, quality, safety

How do we do this?

1. Make the building or environment safe
2. Make the work safe
3. Make the work easier to do

And then we check again to make sure we did the right thing and it really works!

We thank our teams for their support and assistance

[www.hfes.org](http://www.hfes.org)

# Introductions

Please select your primary job responsibility:

Industrial ergonomics

Office ergonomics

Safety

Human performance

Health related field

# It's more than ergonomics...

My job responsibilities have included the following OR I have been on teams that included the following:

Industrial ergonomics

Office ergonomics

Safety

Human factors

Human performance

Quality

Environmental

Engineering

Lean manufacturing

Six sigma

Project management

Furniture or equipment order and purchase

Medical care

Health fairs

Mindfulness

Emotional assistance / counseling

Physical therapy

Return to work

ADA accommodations

Program development or Strategy development

National locations

International locations

Training and Education

# How much control do you feel you have over your career?

On a scale of 1-5

- 1 = NO control at all
- 3 = Some control
- 5 = I am completely in control

Bureau of Labor Statistics - Occupational Employment Projections to 2024  
<https://www.bls.gov/opub/mlr/2015/article/pdf/occupational-employment-projections-to-2024.pdf>



# Tools that help me along the journey

- ▶ University - Internships, Research, volunteering
- ▶ Advanced degrees
- ▶ Reading journals and publications
- ▶ BCPE Professional Certification
- ▶ Subject matter expertise - training or experience
- ▶ TEEK OSHA General Industry course
- ▶ FEMA Incident Management Course
- ▶ Certified Behavior Based Safety Specialist
- ▶ MODAPTS® training & certification
- ▶ Mentoring others: kids AND adults
- ▶ Conference presentations
- ▶ Presentations at other professional meetings
- ▶ Networking Online and In person
- ▶ Local professional organizations or seminars
- ▶ Executive officer in professional organizations
- ▶ Company internal groups and voluntary seminars
- ▶ Lateral positions to gain experience
- ▶ Leadership Women™ Texas
- ▶ National Safety Council®
- ▶ Alpha Kappa Alpha Sorority, Inc.
- ▶ VOLUNTEER!!!!

# Evolution of an Ergonomist

## Career path



## Personal path

Learning through exciting moments!

# NASA Mission Control



Kennedy Space Center, Cape Canaveral, FL  
Graduate student Internship

Johnson Space Center, Houston, TX  
Safety, Quality, Environmental Manager, Logistics Contract

# Hewlett Packard, Roseville, CA

- ▶ I learned that companies do value their employees
- ▶ Company culture is important and matters to my goals and values
- ▶ Meetings at meal times included breakfast or lunch
- ▶ Any other meeting times included Haagen-Dazs® ice cream!

# Johnson & Johnson, San Angelo, TX

<https://www.jnj.com/credo/>

## Our Credo

“We believe our first responsibility is to the patients, doctors and nurses, to mothers and fathers and all others who use our products and services. In meeting their needs everything we do must be of high quality....”

- ▶ I learned that companies can have a value system that mirrors my own
- ▶ Excellent employee treatment and acceptance of diversity

# Project



[LINK](https://youtu.be/kcRzjqbnNbE)

<https://youtu.be/kcRzjqbnNbE>

# Ford Motor Company

Kentucky Truck Plant - Louisville KY

100 acres under 1 roof =12 football  
fields under 1 roof

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Home of Ford SuperDuty Trucks!

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Our goal:

1. Keep people safe from getting hurt
2. Work Smarter and not Harder



# Ford Motor Company

I witnessed employees' loyal commitment to all that they do for the customer.

I learned that tough conversations are not personal and we all have the same goal to produce a high quality product for our customers.

# NASA - Endeavour Shuttle

- ▶ Endeavour flew into space 25 times
- ▶ Final flyover at Ellington Field
- ▶ I learned that a safety focused company with excellent safety records builds trust in the community. NASA is a VPP Star site! <https://www.osha.gov/dcsp/vpp/>



# National Safety Council

Learn something new!

Nominate a peer for Rising Star of Safety Award

I learned that those in high positions are eager to teach, share and mentor. Ask the question!



2010 Rising Star of Safety Award

The screenshot shows the National Safety Council website homepage. At the top left is the NSC logo. To its right is the mission statement: "Our Mission is Safety. The National Safety Council eliminates preventable deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy." A "DONATE NOW" button is positioned to the right of the mission statement. Further right is a "MyNSC Account" section with "Register" and "Login" links. Below this is a dark green navigation bar with menu items: Safety Training, Membership, Work Safety, Road Safety, Home Safety, Engage, Events, and Shop. A search bar is located on the right side of this bar. The main content area is divided into four columns: Services, Safety Topics, Tools & Resources, and Get Involved. Each column lists various resources and programs. Below these columns is a photograph of two men wearing hard hats and safety glasses, smiling. At the bottom right of the page, there is a text prompt: "Have questions? Visit our FAQs or contact NSC."

# Future Projections - We are ready!

## Engineering Occupations - Wages, Employment, and Projections

Search:

Engineering Occupation	Average Annual Salary	Projected % Job Growth - 2012-2022	Projected # Jobs Added - 2012-2022
Health & Safety Engineers	\$84,850	11%	10,000
Industrial Engineering Tech	\$55,660	-3.20%	14,000
Industrial Engineers	\$85,110	4.50%	75,000

All data from the [BLS](#), [ABET](#), & [NCES](#).

If you are looking for a stable and enriching career It's important to not only consider the highest paid [engineering](#) jobs available, but also the engineering fields with the best potential for advancement and employment opportunities. In industries where demand outstrips availability you will find the highest potential earnings along with job security.

<https://typesofengineeringdegrees.org/highest-paid-engineering-jobs/>

# Salary ranges are comparable

United States / Job / Ergonomist

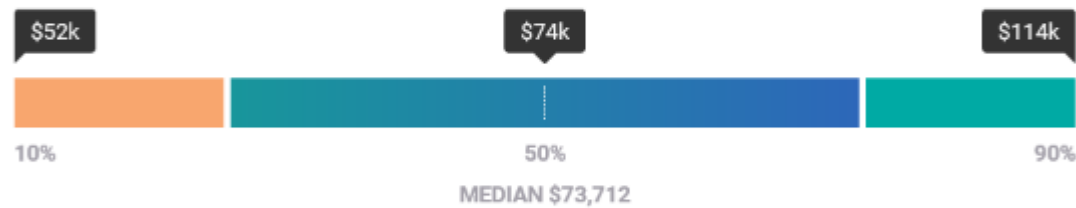
## Average Ergonomist Salary

### \$73,712

Avg. Salary [Show Hourly Rate](#)  
**\$2,606** **\$4,000** **\$12,500**  
BONUS PROFIT SHARING COMMISSION

What am I worth? [Get pay report](#) How should I pay? [Price a job](#)

The average pay for an Ergonomist is \$73,712 per year.



Salary	\$52,345 - \$114,396	
Bonus	\$515 - \$14,865	
Profit Sharing	\$4,000	
Commission	\$12,500	
Total Pay (?)	\$46,196 - \$114,989	

Country: United States • Currency: USD • Updated: 6 Jan 2019 • Individuals Reporting: 99

United States / Job / Environmental Health & Safety (EHS) Engineer

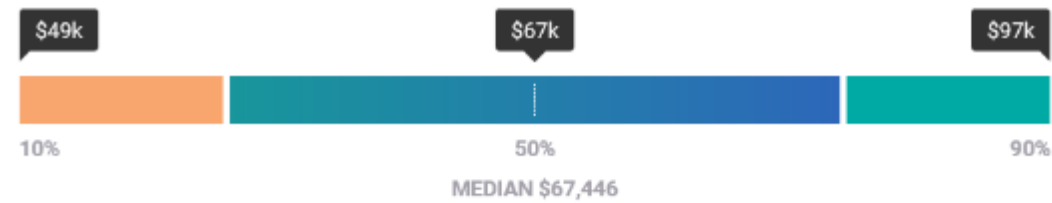
## Average Environmental Health & Safety (EHS) Engineer Salary

### \$67,446

Avg. Salary [Show Hourly Rate](#)  
**\$4,081** **\$2,521**  
BONUS PROFIT SHARING

What am I worth? [Get pay report](#) How should I pay? [Price a job](#)

The average pay for an Environmental Health & Safety (EHS) Engineer is \$67,446 per year.



Experience Skill Job

Salary	\$49,443 - \$96,959	
Bonus	\$278 - \$11,375	
Profit Sharing	\$100 - \$10,000	
Total Pay (?)	\$48,664 - \$101,033	

Country: United States • Currency: USD • Updated: 4 Jan 2019 • Individuals Reporting: 284

<https://www.payscale.com/research/US/Job=Ergonomist/Salary>

# Salary ranges are comparable

United States / Job / Ergonomist

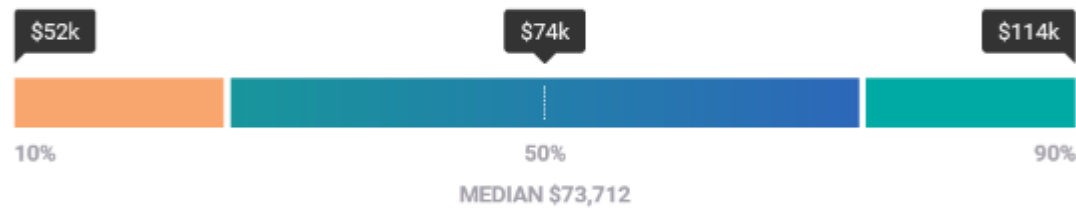
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Country: United States • Currency: USD • Updated: 6 Jan 2019 • Individuals Reporting: 99

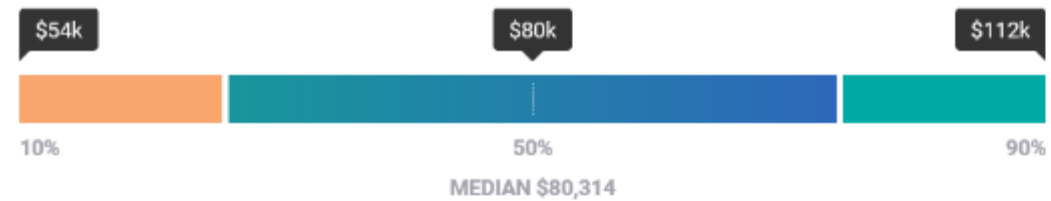
## Average Environmental Health & Safety (EHS) Manager Salary

### \$80,314

Avg. Salary [Show Hourly Rate](#)  
**\$6,119** **\$3,072** **\$6,500**  
BONUS PROFIT SHARING COMMISSION

What am I worth? [Get pay report](#) How should I pay? [Price a job](#)

The average pay for an Environmental Health & Safety (EHS) Manager is \$80,314 per year.



City Experience Skill Employer Job

Salary	\$53,539 - \$112,433	
Bonus	\$892 - \$15,523	
Profit Sharing	\$0.00 - \$11,657	
Commission	\$6,500	
Total Pay (?)	\$51,684 - \$119,933	

Country: United States • Currency: USD • Updated: 3 Jan 2019 • Individuals Reporting: 3,791

<https://www.payscale.com/research/US/Job=Ergonomist/Salary>

# Camille's Thoughts

1. Discover what you love!
  - ▶ I love helping people and being the “voice” to improve the work environment
2. Make a plan to get to what you love...and be ready for it to evolve
  - ▶ My very first goals that I remember...to get A's in school, to ride my bike without training wheels, to get accepted in the International Baccalaureate program....
  - ▶ My first career goal was to be an industrial engineer and make \$27K a year
  - ▶ In college my goal was to be “marketable” and get a “good” job after graduation
  - ▶ My life/career goal was to live and work in Houston, TX
  - ▶ Current personal goal to be a published author
  - ▶ My future retirement goal is to be a professor and consultant
3. Be true to your own moral compass and your value system!

Has the evolution of an ergonomist occurred by design or happenstance?

A) Design

B) Happenstance

Remember that you can influence your career!



“Before anything else, preparation is the key to success” Alexander Graham Bell



Bell was a scientist, engineer and inventor  
\*Inventor of the first practical telephone

[LINK](#)

# Many thanks to those that have been part of my evolution!

- ▶ Remember to register for the conference!

[www.iise.org/AEC](http://www.iise.org/AEC)

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